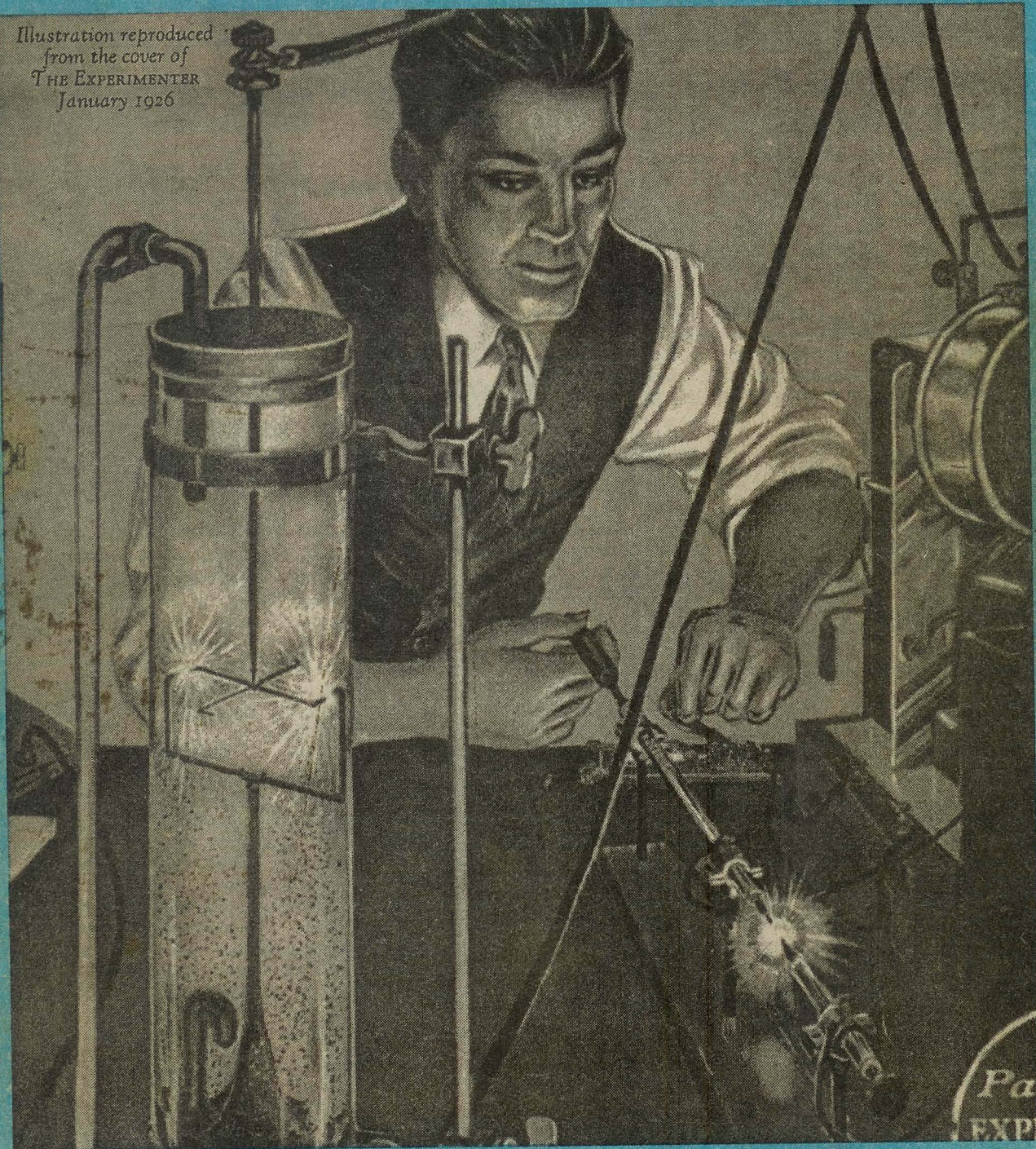


L I N D S A Y ' S
TECHNICAL
BOOKS

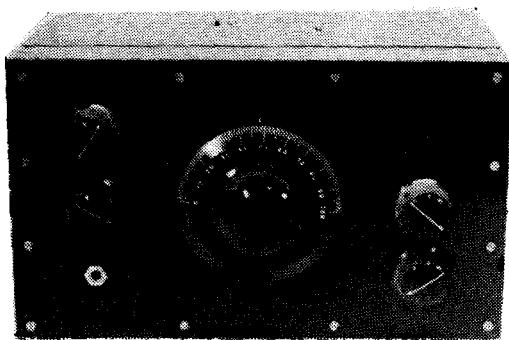
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THE EXPERIMENTER
January 1926



Fall 1993

LINDSAY PUBLICATIONS INC
PO Box 538, BRADLEY IL 60915-0538 • 815/935-5353

Catalog 518
\$1.00



Build Solid-State Regenerative Receivers!

Dear Mr. Lindsay:

A good friend of mine has sent me a copy of your re-done Short Wave Radio Manual of 1934, the year, incidentally, that I first received my amateur license. So it takes me back most pleasantly to the days of my youth. That I have enjoyed perusing it very much goes without saying, I believe.

It was also pleasant to read your commentary upon building regenerative receivers at the back of the book. We agree perfectly upon the effectiveness of these devices. Indeed, it was the inception of this that first made practical, long-distance radio possible. A good, properly used regenerative detector may develop a gain of 30 decibels or more, equal to that of three non-regenerative cascaded stages.

But, as you know, one always gets only what one pays for. Buy a fancy, store bought receiver and you pay for results with money. Build a "homebrew" regenerative job, and you pay for it in the effort of building and operating it with patience and care, two words that most people scarcely know any more...

It has been my experience that the good old vacuum tube still makes the most effective regenerative detector, particularly the RF pentode. Next best, in the solid state line is the junction FET, as you suggest. But it takes two of these to do the job of one good pentode tube. However, all the FETs need is a nine-volt battery, no power supply required, a real advantage as you say.

Through the years I've found that the "Throttle Capacitor" mode of regeneration control, along with a properly adjusted tickler coil (as upon page 56, 58, 62, 66 and 259 of your book) is by all odds the smoothest and most effective regeneration control method. For pentode tubes, of course, a pot in the screen circuit is ok, too. But, in general, the capacitor is my favorite - never critical, noisy or "jumpy", I've found. I've also found that when a tube is used, the higher the gridleak resistor the better (my best job used a 20 megohm leak). But for FETs, one megohm seems about right. (Too low and the sensitivity is down. Too high and the thing gets "fussy.") I would disagree, but not argue with, your theory of audio feedback through the power-source. I would feel that the inductive reactive effect of the audio transformer, or choke is the culprit. Pure resistance coupling does not develop "fringe howl," for instance. Also I find that with most FETs, a 1000 ohm source resistor is better than the 2700 ohm one that you suggest in the diagram at the top of page 247.

Building and using regenerative receivers continues to be a pleasurable experience for me. I have tried to get some young fellows of my acquaintance into this sort of activity with negligible success; they'd rather spend daddy's money upon fancy, store-bought gear. They do not realize how much honest education and real, challenging adventure they're depriving themselves of by that attitude. Too bad...

You are doing your part to keep the great self-education process alive and well. Keep it up!

C. F. "Rock" Rockey
Box 171
Albany WI 53502

Official 1934 SHORTWAVE RADIO MANUAL

Incredible How-To, Reference, and a special new chapter on solid-state sets!



OFFICIAL 1934
SHORTWAVE RADIO MANUAL
edited by Hugo Gernsback
& H W Secor
new chapter by T. J. Lindsay

Build simple, high-performance old time A shortwave radios! You can. All of the secrets are here: the circuit diagrams, parts layout, coil specifications, construction details, operation hints, and much more.

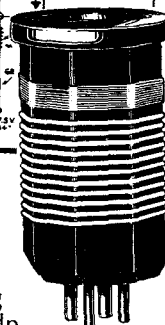
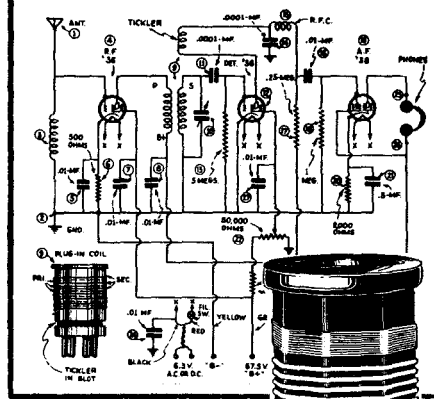
Back in the 20's and 30's the only low-cost way of listening in on the newly discovered and fascinating shortwave radio frequencies was to build a set. Shortwave construction magazines flourished, even during the depression.

This is a compilation of construction articles from "Short Wave Craft" magazine. It's wall-to-wall how-to.

SECRETS OF OLD SETS! At the rear of the book are circuit diagrams, photographs, and design secrets of all shortwave receivers being manufactured in 1934 including some of the most famous: SW-58, the SW-5 "Thrill Box", the deForest KR-1, the Ham-murland "Comet Pro", and many more.

BUILD SOLID-STATE SETS! You'll find that all the circuits use tubes since transistors hadn't yet been invented. And you'll also find that the original tubes listed are usually difficult to find today. Included is a new chapter showing how you can use transistors to replace hard-to-find vacuum tubes. You'll even see the circuit that was lashed together on a table top one night using junk box parts, one of my wife's hair curlers and alligator clips. When I hooked it up to an antenna strung across the basement ceiling and attached a 9 volt battery, signals started popping in like crazy. In a

THE NATIONAL COMPANY 3 TUBE S. W. SET



couple of minutes I heard an urgent message from a ship's captain off Seattle asking for a navigator to help him through shallow water. Not bad, considering I live near Chicago!

HOT PERFORMERS! These small regenerative receivers are extremely simple, but do they ever perform! I've built dozens of them, and they never fail to amaze me! Even master machinist, Dave Gingery has built these sets.

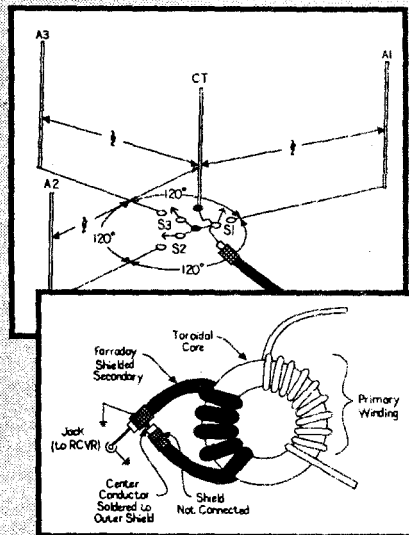
This is the nuts for the experimenter, the survivalist who is concerned about basic communication, shortwave listeners, ham radio operators who collect old receivers, and just about anyone interested in old-time radio.

Great book. Best old-time radio book I've ever seen. And I look at every one I can get my hands on. Consider it carefully. Even if you never build one of these radios, you'll get hours of enjoyable reading out of this book. Top rate. Order a copy. 8 1/2 x 11 paperback 260 pages Cat. no. 4643 \$15.95

RECEIVING ANTENNA HANDBOOK

by Joe Carr

Radio amateurs are always interested in antennas. Many go to extreme in their quest for the perfect antenna. On the other hand, shortwave listeners seem to be more interested in the receiver. But they should probably pay more attention to the antenna.



RECEIVING ANTENNA HANDBOOK

Here's a great book that covers receiving antennas from basics to the unusual. It's well illustrated and easy-to-read, and will give you plenty of new ideas to try.

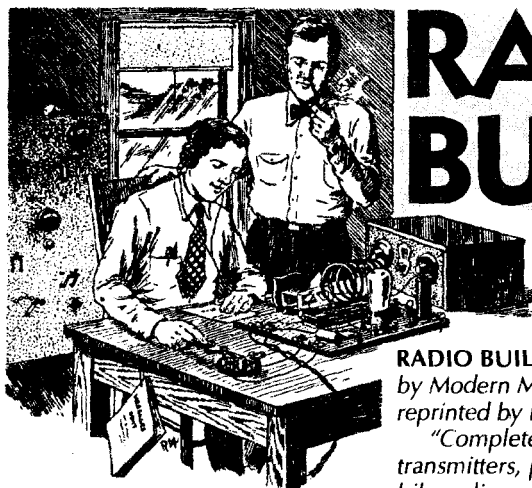
Chapters include preliminaries, real-world antennas, antenna and lightning protection grounds, transmission lines, some quick and dirty antennas, the dipole and its relatives, longwire antennas, other wire antennas, vertical antennas, directional antennas, small loop receiving antennas, low frequency antennas, and odds and ends.

Within the chapters you'll learn about stealth antennas for apartment dwellers, helically wound antennas, discons, counterpoise grounds for verticals, a ferriloop antenna, parasitic beams, the Thorne array, longwire termination resistors, steerable notch Beverage antennas, rhombics, trap dipoles and on and on.

You get loads of practical information from construction formulas and directional plots, to schematics for RF amps, electrical equivalent diagrams and construction details. The book is on the expensive side but delivers more useful receiving antenna information than I've seen in a single book in a long time.

Get a copy of this. You "ain't gonna hear nothing" from your million dollar receiver unless you give it signals from a top-rate antenna. Get hot. Build a good antenna. Order a copy. 8 1/2 x 11 paperback 189 pages
Cat. no. 399

\$19.95



RADIO BUILDER'S

Great 1935 Collection
of Modern Mechanix
how-to articles....

RADIO BUILDER'S MANUAL

by Modern Mechanix Publishing Company
reprinted by Lindsay Publications

"Complete plans for all-wave receivers, amateur transmitters, police call adapters, crystal sets, automobile radio, portable receivers, as well as hundreds of other radio plans, stunts, and trouble-hunting kinks."

This 1935 paperback provided builders with a convenient collection of the best how-to articles from back issues of Modern Mechanix magazine. You get dozens and dozens of plans and odds and ends such as Wheatstone bridge for test bench, smallest broadcasting station, build selenium electric eye, 1-tube shortwave marvel, build a heavy duty power supply, rejuvenating discarded dry cells, 3-tube tool box portable, cigar box receiver, auto aerials for 5-meter transceiver, smallest all-electric all-wave set, and on and on.

Sure it's all vacuum tube technology. And the police call adapters, obviously, won't receive anything anymore. But this is still fun stuff to read. The wall-to-wall illustrations will keep you occupied for hours. And if you really want to build samples of this old time gear, you'll have lots of fun doing it.

Get a copy and start digging into articles entitled "Powerful Crystal Set Brings in Distance," "This Electromagnet Does Mystifying Stunts," and "Powerful 5-Meter Radiophone Uses Broadcast Set Parts." Fun reading. Order a copy today. 7x10 paperback 130 pages
Cat. no. 21168

\$9.95

Plugs Into LIGHT SOCKET

The new 6C5 tube used in this set actually does the work of three or four radio tubes, picking up the radio frequency signals, detecting them, then furnishing the audio frequencies for the headphones.

Naturally, regeneration is used to make the set as sensitive and selective as possible. A potentiometer shunted across the tickler winding of the plug-in coil serves as a regeneration control.

The Chain Universal A.C.-D.C. circuit permits this set to be used interchangeably on alternating or direct current. The filament of the two tubes are connected in series with a 5.0 ohm voltage limiting resistor. In case a pilot light is desired for the tuning dial, this is connected in series with the tube filament and shunted by a 50 ohm wirewound resistor. The voltage limiting resistor should then be set at 250 ohms.

A small trimmer condenser in the antenna circuit permits use of either a long or short aerial, and gives an added tuning control on weak short wave stations.
(Continued on page 130)

Plug-in coils should also appear under the heading of "Plug-in Coils" in the Radio Builder's Manual.

15-25 METAS
50-100 METAS
100-200 METAS

200-300 METAS
300-400 METAS
400-500 METAS

500-600 METAS
600-700 METAS
700-800 METAS

800-900 METAS
900-1000 METAS
1000-1100 METAS

1100-1200 METAS
1200-1300 METAS
1300-1400 METAS

1400-1500 METAS
1500-1600 METAS
1600-1700 METAS

1700-1800 METAS
1800-1900 METAS
1900-2000 METAS

2000-2100 METAS
2100-2200 METAS
2200-2300 METAS

2300-2400 METAS
2400-2500 METAS
2500-2600 METAS



Regeneration control at lower right and large variable capacitor at upper right in the plug-in coil.

Plug-in coils are sold by Modern Mechanix Publishing Co., Inc., 1000 N. 1st St., Chicago, Ill. 60610.

200-300 METAS
300-400 METAS
400-500 METAS

500-600 METAS
600-700 METAS
700-800 METAS

800-900 METAS
900-1000 METAS
1000-1100 METAS

1100-1200 METAS
1200-1300 METAS
1300-1400 METAS

1400-1500 METAS
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2000-2100 METAS
2100-2200 METAS
2200-2300 METAS

2300-2400 METAS
2400-2500 METAS
2500-2600 METAS

2600-2700 METAS
2700-2800 METAS
2800-2900 METAS

2900-3000 METAS
3000-3100 METAS
3100-3200 METAS

1-Tube Short Wave Marvel Is RECEIVER or Adapter

By THOMAS A. BLANCHARD



Complete short wave receiver or adapter, built on a metal panel, with a plug-in coil, a potentiometer, and a variable capacitor.

Plug-in coils are sold by Modern Mechanix Publishing Co., Inc., 1000 N. 1st St., Chicago, Ill. 60610.

200-300 METAS
300-400 METAS
400-500 METAS

500-600 METAS
600-700 METAS
700-800 METAS

800-900 METAS
900-1000 METAS
1000-1100 METAS

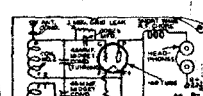
1100-1200 METAS
1200-1300 METAS
1300-1400 METAS

1400-1500 METAS
1500-1600 METAS
1600-1700 METAS

1700-1800 METAS
1800-1900 METAS
1900-2000 METAS

2000-2100 METAS
2100-2200 METAS
2200-2300 METAS

2300-2400 METAS
2400-2500 METAS
2500-2600 METAS



Complete short wave receiver or adapter, built on a metal panel, with a plug-in coil, a potentiometer, and a variable capacitor.

Plug-in coils are sold by Modern Mechanix Publishing Co., Inc., 1000 N. 1st St., Chicago, Ill. 60610.

200-300 METAS
300-400 METAS
400-500 METAS

500-600 METAS
600-700 METAS
700-800 METAS

800-900 METAS
900-1000 METAS
1000-1100 METAS

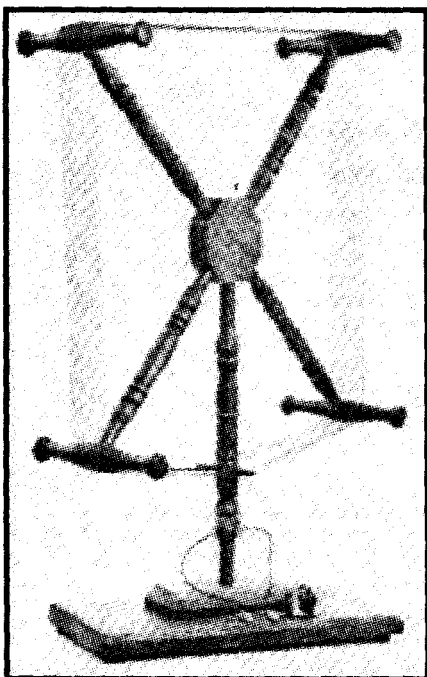
1100-1200 METAS
1200-1300 METAS
1300-1400 METAS

1400-1500 METAS
1500-1600 METAS
1600-1700 METAS

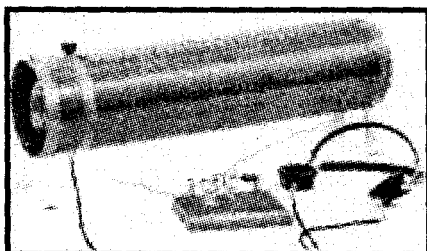
1700-1800 METAS
1800-1900 METAS
1900-2000 METAS

2000-2100 METAS
2100-2200 METAS
2200-2300 METAS

2300-2400 METAS
2400-2500 METAS
2500-2600 METAS



CRYSTAL SETS!



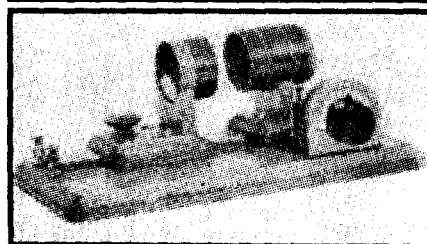
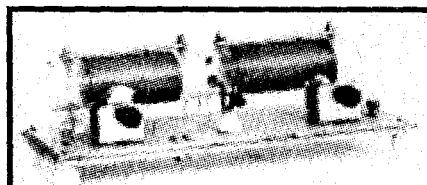
RADIOS THAT WORK FOR FREE

by K.E. Edwards

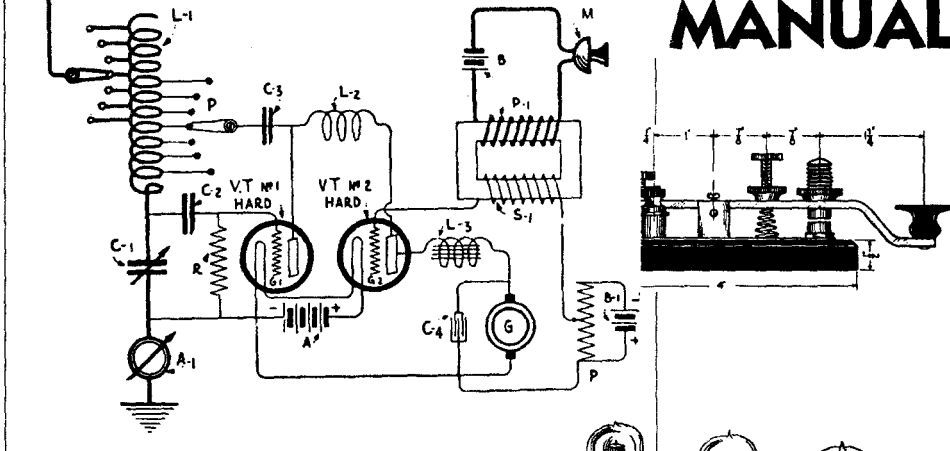
Build yourself a crystal set! You'll be shown everything you need to know - from materials to tools to techniques. Edwards will show you how to build "hot-rod" crystal sets with fancy features that can outperform the old oatmeal box versions, but are still simple. If you've never built anything electronic at any time but would like to try, this is a great place to start. This book has become a classic in its field, and it gives me a good feeling. I think you'll like it, too. 5 1/2 x 8 1/2 paperback 138 pages — well illustrated

Cat. No. 314

\$7.95



WIRELESS EXPERIMENTER'S MANUAL



WIRELESS EXPERIMENTER'S MANUAL

by Elmer E. Bucher

reprinted by Lindsay Publications

In 1920 amateur radio was hot! It was the cutting edge of technology! Everyone wanted in on it, and Bucher showed readers how to build equipment and operate it. You can relive those days!

You get chapters on advice to the amateur, formation of a radio club, principles of the radio transmitter, construction of transmitters, construction of aerials and masts, tuners and detectors, vacuum tube detector and amplifier, undamped wave receivers, undamped wave transmitters, cabinet receivers and accessories, design of wavemeters, closed coil aerials, Weagant static eliminator, and long distance relays by radio.

You get everything from early spark gap transmitters which were related to Tesla coils to continuous wave transmitters and radio telephone transmitters. You get great construction how-to on winding power transformers, coil winding machines, oscillation transformers, high-voltage condensers, rotary spark gaps, making a key, building receivers with variometers, and homemade crystal detectors.

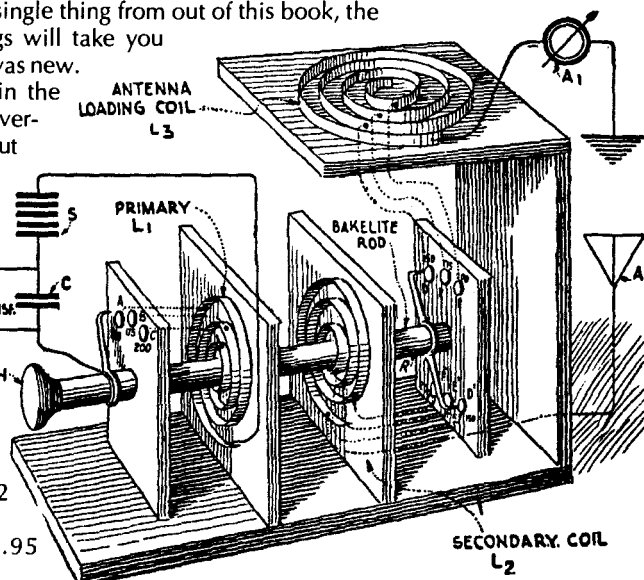
But this is also extremely "modern" (for 1920). You'll learn about vacuum tubes and their use as replacements for crystals and as amplifiers. You'll even get one of the very earliest circuits for Armstrong's original regenerative receivers. And on and on it goes.

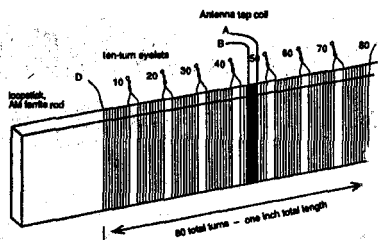
Even if you never build a single thing from out of this book, the countless incredible drawings will take you back to the days when radio was new. You can almost participate in the excitement of new radio discoveries just as shortwaves were about to be explored for the first time.

Great book! Fun reading. Incredibly good if you want to build crystal sets, Tesla coils, transformers, repair old radios, or build reproductions of antique equipment. Fun reading for the old-time radio fan. Get a copy. I think you'll like it. I do. (Is it obvious? Or what?) 5 1/2 x 8 1/2 paperback 350 pages

Cat. no. 20854

\$13.95



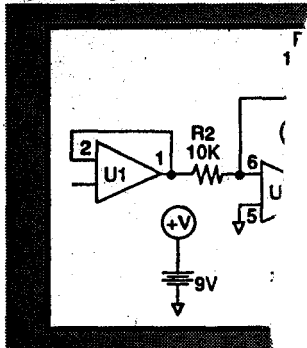


XTAL Set Soc

REPRINTS FROM JULY 91 TO MAY
by Phil Anderson, W0XI

Radio can't get any simpler than
Anyone can build one! But what do
you've wrapped an oatmeal box with
your answer.

In July 1991 Phil Anderson from
Kansas launched "The XTAL Set Society".
should have signed up. But you still
can find out what you missed by
of this reprint of his newsletters.
If you're into crystal sets, you'll
be reading.



You get articles on building
meter, a shortwave crystal
1920s Crystal Sets Work Again
crystal set, an FM crystal set,
a variable capacitor crystal set (v.c.),
of early articles on crystal
set, matching your antenna
for maximum signal reception, detector
crystal set, and other bits.

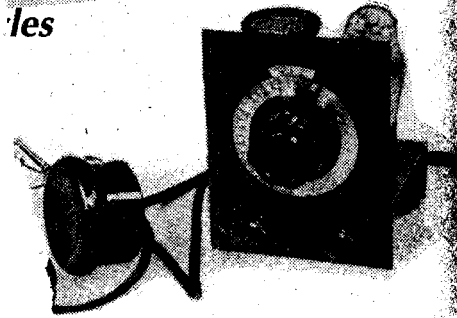
Yes, you'll find information.
Crystal sets are fascinating.
length of getting more practical
hardware - a move from circuit
That's a refreshing change.
quite interesting. Get a
spiral binding about 36 pages.
Cat. no. 395

More!

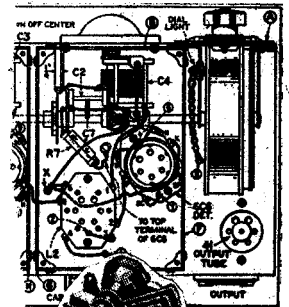
XTAL SET SOCIETY VOL
by Phil Anderson W0XI

More interesting articles.
93 newsletters. Articles on
detector, minimum detector
circuit, improved sensitivity
circuits, universal crystal
electrolytic detector, the
'595' Tuner revisited, an
Italy, and more. Good read.
spiral binding 39 pages.
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ster; Europe on One Tube; Bible Radio; "B" Supply for Porting; Priority Receiver Uses New; Compact Rectifier Unit; Set Broadcast Set; Week's Radio; Midget AC-DC ReBook-End Radio for Your ne-Tube All-Electric Set; t for Beginners; Pocket-lio Tester; "Wireless" Raograph; Low-Cost Home r; Tom Thumb Radio; Phonograph; Two-Tube and much more!



is fun reading and a great source of construction ideas. Get yours today. The price is real and the content is super. 1 copy today. You'll enjoy it x 8 1/2 booklet 32 pages . 4937 \$4.95

DOERLE CATALOG

originally offered by Oscar Kusterman, NY
reprinted by Lindsay Publications

Here's a great little 1930's catalog issued
by NY radio dealer, Oscar B. Kusterman. You
get great illustrations and descriptive copy of
receivers and ham radio transmitters, along
with schematics and practical details.

Doerle Catalog

Radio Catalog and Circuit Book from the 1930's!

Examine the Doerle Model D-7 with its
6K7 RF amp feeding a regenerative detective
and powerful AF amplifier. A separate
6J5 acts as a superregenerative detector for 2
1/2, 5, and 10 meters. You get the complete
wiring diagram.

The sw regenerative receiver used a pair
of 37's to cover the bands from 600 to 12
meters. A complete kit sold for only \$2.50
less tubes! The 3-tube AC-DC receiver covered
600 to 12 meters using the three 76's
and running off batteries or 110 VAC. Study
the five tube

BS-5 Five
B and
Bandswitch
Receiver,
the Doerle
Model D-5
cover 1000
to 9 meters,
the Doerle
"19" single
tube receiver
kit, the
Doerle AC4,
and more.

You get a
whole page
of circuits

"for the fan who

builds his own receiver hookups." At the
back of the catalog is an order blank, but
don't try to use it. I've already notified the
New York City postoffice, and if you try to
order any of this merchandise, postal
authorities will track you down and have you
put away where you belong.

But that doesn't mean you can't browse
through this catalog and imagine operating
one of these sets. What's more, you can start
searching for old parts so that you can build

one of these fa-
mous little
radios. It's
well illus-
trated, fun
to read, and
inexpensive.

Order a
copy today! 8 1/2 x

11 booklet 24 pages well illustrated
Cat. no. 20455

\$6.50

SHORT-WAVE HANDBOOK

edited by
Cockaday & Holze
reprinted by
Lindsay Publications

Times were tough in '33,
but you could always have
some fun building a short
wave receiver and tuning
into the mysterious signals
and exotics broadcasts fill-
ing the air. Radio News
magazine published this
nifty book to get people
started in radio building.

Chapters include funda-
mental principles, helpful
short wave data, how to
make five simple short wave receivers, two
advance short wave designs, popular com-
mercially built SW apparatus, getting the
most out of the short waves, short wave
stations lists, short wave DX & reception
reports, learning the code, amateur trans-
mitters, and ultra short waves.

Once you're through some of the basic
theory of short wave communication, you'll
build a basic two tube regenerative receiver,
a hot three tube job with RF stage, one of
those amazing receivers you can plug right
into the wall outlet!, a TRF with a regenera-
tive detector and more.

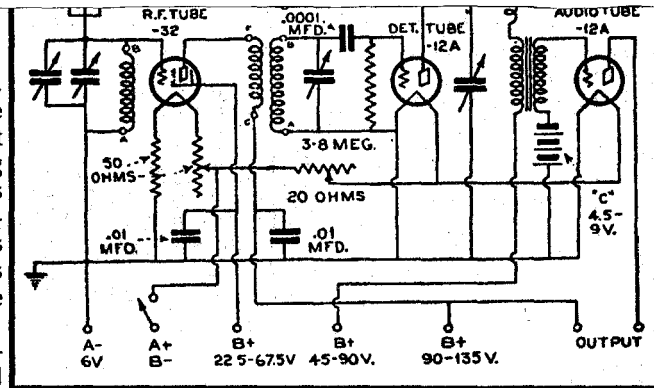
You'll get introduced to the intricacies
of the Lincoln R-9 receiver, the American
Bosch Model 260 "Super", the Scott deluxe
all-wave super, the Hammarlund Comet
"Pro", the Midwest sixteen tube super, the
incredible National FB-7 receiver and more.

You'll get frequen-
cies and times for lis-
tening to PLE from
Bandoeng, Java and
YO1 from Bucharest.
You'll learn the code,
get your amateur li-
cense and even build a
crystal-controlled
transmitter!

This is a much bet-
ter than average short
wave book because it
delivers details on building your
own receivers as well as on com-
mercially available sets. And even
though the stations are gone, you
can imagine what it must have
been like to track down those
exotic signals listed in the last
chapters.

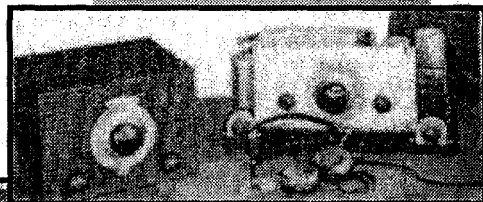
Good book! Something worth
considering carefully... especially
if you like to tinker with
regeneratives. Get a copy. I think
you'll like it. 5 1/2 x 8 1/2 paper-
back 136 pages
Cat. no. 21176

\$9.95



SHORTWAVE HANDBOOK

*Great 1933 SW Info!
Build one of several
sets, or buy one of
the great new ones!*



Available on
or about
Oct 25, 1993
Orders Taken
In Advance



How to Build Your Radio Receiver

From 1924!
Construction articles
from POPULAR RADIO!



POPULAR RADIO HANDBOOK NO. 1 HOW TO BUILD YOUR RADIO RECEIVER

edited by Banning & Cockaday
reprinted by Lindsay Publications

Today we talk about high tech inventions like space shuttles, computerized virtual reality, and gene-splicing. In 1924 the craze was radio. And it was fed by the amazing discovery that short waves could carry messages around the world.

The best thing about radio back then was that just about anybody who could save enough money to buy a vacuum tube could build their own receiver and get in on the fun. (I don't know of anybody who has their own space shuttle...)

The people at Popular Radio published their magazine to cater to the exploding interest. What you get here are the best construction articles from that magazine.

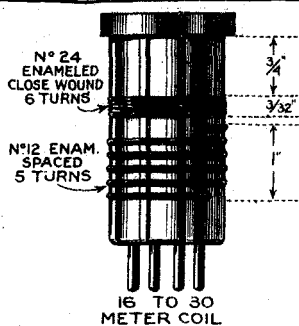
Chapters include: how to read a radio diagram, how to put up an outdoor receiving antenna, how to build an efficient crystal receiver, how to build the Haynes DX receiver, how to build a two-stage audio-frequency amplifier, how to build the four-circuit tuner, how to build a tuned radio-frequency receiver, how to build the improved four-circuit tuner, how to improve the three-tube four-circuit tuner, how to build the new regenerative super-heterodyne receiver, and broadcasting stations in the U.S. of 50-watt power or more.

This is old time stuff with four-prong tubes, coupling controlled by moving the coils, bread-board layouts, and 45 volt "B" batteries. You get drilling layouts for the Bakelite panels, dimensions for the cabinets, wiring instructions and more. This is one of the best early practical how-to books I've seen

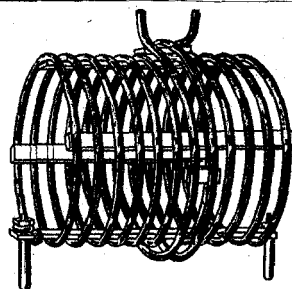
If you have radios to restore, or have old parts you'd love to lash up into a working set, then this is for you. For the rest of us it's fun reading. It's technological history! Early radio at its best. Get a copy. 8 1/2 x 11 paperback 104 pages

Cat. no. 20951

\$8.95



16 TO 30
METER COIL



20 METER
TRANSMITTER COIL

SHORTWAVE COIL DATA BOOK

by Radio Publications

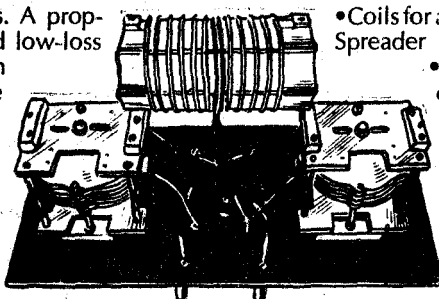
Coils! Coils! Coils! They're the heart and soul of shortwave radio receivers and transmitters. A properly wound low-loss coil can make the difference between having an average piece of gear or a hot performer.

And it seems the simpler the receiver, the more important the coils.

Here in one jam-packed booklet from 1937 are hints, tips, charts to help the shortwave radio builder design and build the best coils possible. You get informative articles from Gernsback magazines such as

•Coil Data for TRF Receivers

- The One Tube Oscillodyne Coils
- The Mono-Coil
- 2 Winding Coils for 10-500 Meters
- Coils for a 3 Tube Band Spreader
- and many others



You also get nine different circuit diagrams for the "Most

Popular SW Tuning Circuits" and five "Transmitting Circuits employing the coils described".

This is highly specialized information on just one important topic essential to successful radio construction. It's only 16 pages but it's quite inexpensive and delivers. Get a copy! 8 1/2 x 11 booklet 16 pages

Cat. no. 830

\$1.95

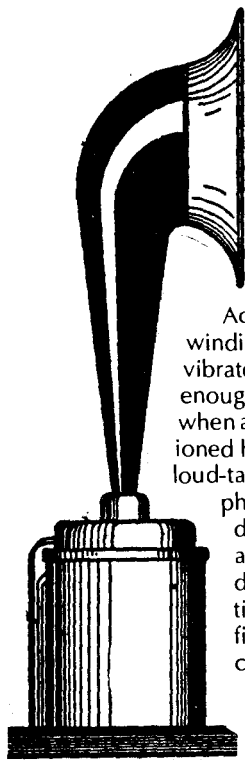
This Electromagnet Does Mystifying Stunts



•Build this electromagnetic cannon that "shoots" aluminum projectiles.

•Just one of many projects in Radio Builders' Manual described elsewhere in this catalog.

LOUD TALKERS



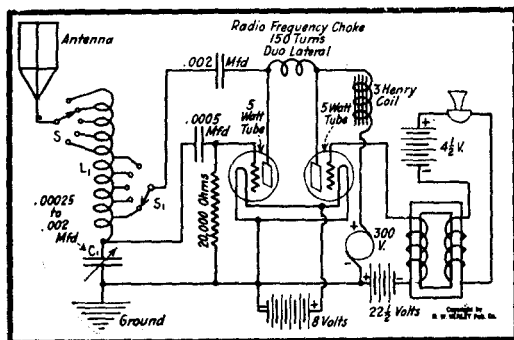
**LOUD TALKERS
HOW TO
BUILD THEM**
by H. Winfield Secor
reprinted by
Lindsay Publications

You probably wouldn't have been able to afford a loud talker (loud speaker) back in '23. You would have had to build one.

Actually this is a book about winding the electromagnetic that vibrates a diaphragm violently enough to hear it across the room when amplified with an old-fashioned horn. Sections are entitled loud-talker field frame, the diaphragm and moving coil, data on loud-talkers actually built, details of step-down transformer, connection to vacuum-tube amplifier set, power amplifier circuit, bi-polar loud talker made from odd parts, building the electromagnet, and more. Unfortunately, there is

nothing of significance on the horn.

It's just a little booklet. The original is brittle and yellow, having been printed on the cheapest paper. It's interesting. Rarely will you find anything on speakers. Worth adding to your radio collection. Order a copy! 5x7 booklet 48 pages Cat. no. 20803 \$3.50



HENLEY'S 222 RADIO CIRCUIT DESIGNS
by Anderson, Mills, & Lewis

Wow! If you're into building old time radio circuits or just like to relive the old days, you MUST have this incredible book of schematics from 1924! This is "a comprehensive and up-to-date collection of modern receiving and transmitting circuits with complete design data".

You get loads of circuits on all kinds of equipment. For instance, chapter six presents 25 different schematics for the basic crystal set using every conceivable type of loading and tuning arrangement.

100 RADIO HOOK-UPS

by Maurice L. Muhleman
reprinted by Lindsay Publications

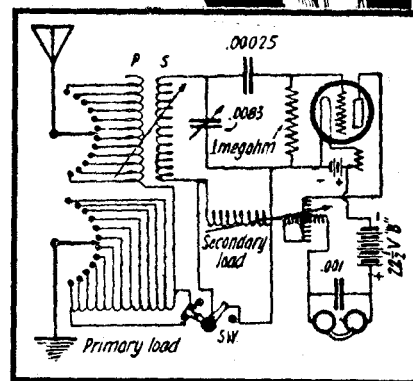
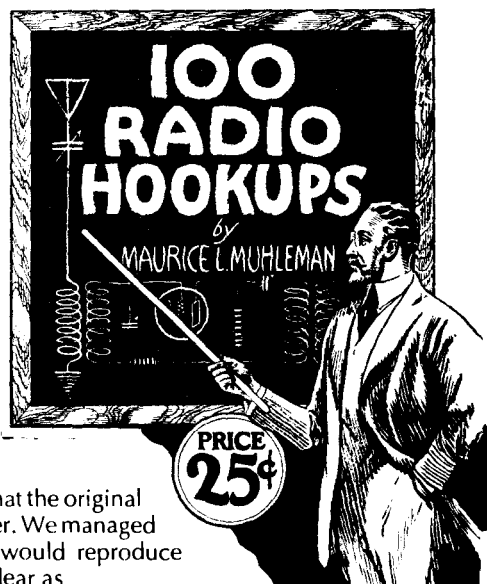
With this inexpensive and immensely popular 1920's booklet you can go back and discover both short- and long-wave radio all over again. You get 100 different circuit diagrams using triode vacuum tubes, honeycomb coils, variometers, A.F. transformers, B batteries and all the rest.

You get hook-ups for crystal sets, plain vacuum tube sets, regeneratives, the famous Reinartz, improved Reinartz and other combination sets, RF amplifier sets, Neutrodyne, reflex circuits, super-regenerative, superheterodyne, and several miscellaneous sets.

What I don't like about the book is that the original was poorly printed on really cheap paper. We managed to "clean" up the original so that it would reproduce reasonably well. It's not as sharp and clear as I would like, but I doubt that I will ever see another copy.

You don't get detailed coil data, specifications, or how-to. This was an idea book for people who had already built a radio and wanted to try something else. Maybe you can use these circuits with modern field-effect transistors and parts salvaged from transistor radios to build modern versions. If you're good at scrounging antique parts, you might want to build a replica.

I like it. Small, inexpensive and worth having! It's from the golden age of radio. Order a copy! 5x7 paperback 48 pages Cat. no. 20641 \$3.95



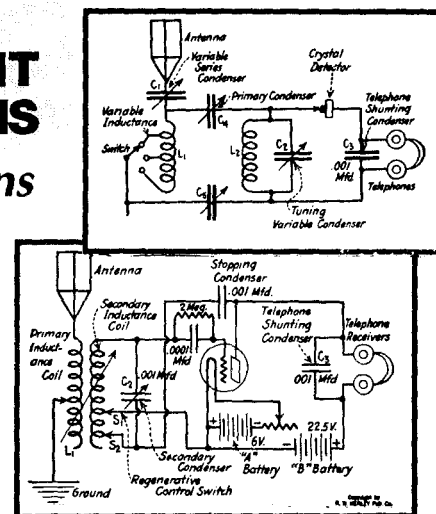
222 RADIO CIRCUIT DESIGNS

Incredible radio plans from 1924!

Chapter seven launches the reader into vacuum tube detectors some with even more incredible tuning arrangements. You'll find a variety of regenerative receivers, and even a crystal receiver with an RF amplifier!

After chapter eight on audio amplifiers comes chapter nine on miscellaneous circuits which include ultra-audio receiver, Reinartz tuner with RF, detection and audio, one-tube reflex with crystal detector, three-tube reflex with RF transformers, inverse reflex, CW receiver with BFO, three-tube neutrodyne, counter EMF circuits, Cockaday receiver, Bishop super-regenerative receiver, many others.

The final section of circuit diagrams reveals designs for spark, CW, modulated CW and AM transmitters. Transmit from your car, through power lines, or from aerials!



Relive the days of radio when circuits were simple and components hot and heavy. This book is for you. You won't find any 1/4 watt resistors, DIP IC's, or LED's. You have better start looking for iron core audio transformers, carbon microphones, and UV203's! Absolutely great book! Great fun! A must have! Order a copy. You'll like it. 5 1/2 x 8 1/2 paperback 271 pages Cat. no. 20323 \$11.95

It's 1914! And you've decided to build a receiver to listen in the wireless traffic that is beginning to fill the airwaves. Or you've decided to build a powerful sparkgap transmitter. Or you can't wait to duplicate Tesla's experiments. But where do you get parts?

A collection of vintage electrical equipment. In the top left is a battery with two cells and terminals. Next to it are two large coils of wire. Below the battery is a circular meter with a scale from 0 to 2 and the word 'AMPERES'. To the right of the meter is a large transformer with a cylindrical core and a fan-like structure. In the center is a dynamo or generator with a belt and a pulley. To its right is a smaller dynamo or generator. In the bottom right is a large coil of wire. The text 'ELECTRO IMPORTING COMPANY' is written in a stylized font at the top right. The text 'Complete 1914' is written in a bold, sans-serif font at the bottom left.

Complete 1914 Radio Parts Catalog!

much, much more.

(No, you can't order any of the equipment listed. If you try, you'll just make a fool of yourself.)

This is a small, well-illustrated, jam-packed catalog that features unusual equipment that is no

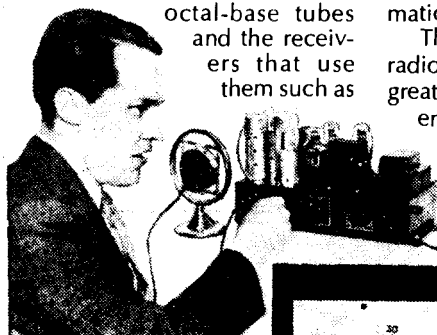
longer manufactured and no longer used. This is fun reading and great reference for the collector, restorer, or builder of replicas. You'll find this quite enjoyable. I recommend it to any antique hardware freak, in other words, YOU! Get a copy. 4 1/2 x 6 1/2 paperback 144 pages
Cat. no. 20587 \$7.95

Get the latest radio news by studying the best articles from the 1935 issues of *Radio News* and *Shortwave Radio Magazine*.

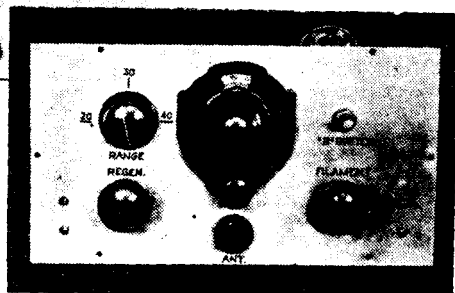
Learn about the latest developments in television: disk scanning versus cathode ray systems. Discover the brand new metal octal-base tubes and the receivers that use them such as

Build amateur transmitters, a 3/4 meter transceiver, and use the latest transmitting tubes. Learn to build broadcast receivers: a universal superhet, a 2-volt DX'ers Superhet, a Superhet De Luxe, and more. You also get articles on servicing, audio amplifiers, radio experimenting, station lists and more. Every page is well illustrated with photos, schematics, drawings and tables.

This is a fun book for old-time radio buffs and builders. Another great book for your radio reference library. Get a copy! 8 1/2 x 11 paperback 64 pages
Cat. no. 20218
\$5.95



the Atwater Kent 649, the GE A-82, and the Super Skyriders. Study plans for shortwave radios: a single tube all-wave set, a 3-band set, and 9-tube amateur receiver, and more.

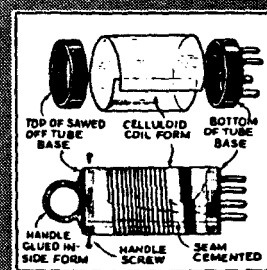


by Short Wave
& Television Magazine
reprinted by
Lindsay Publications

Short Wave & Television Magazine frequently published reader's questions and answers as well as small "fillers" of circuits, hints, tips and kinks. In 1938 a collection of these tiny articles was reissued in this 64 page book.

You'll get tips on winding coils, bending chassis, soldering phone tips, making a lightning arrester from a spark plug, plans for a rf amplifier, a 2 tube SW set, another for a motorcycle, a 2 tube battery set, a 6.3 volt 3 tuber, and on and on. There are hundreds of hints and kinks here!

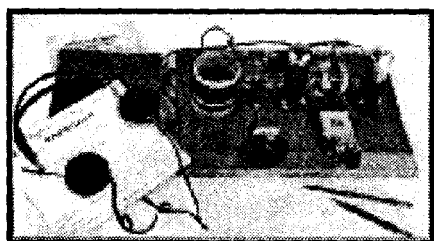
You'll wish the stories were longer, but there are so many great ideas (some a little ridiculous) that you won't complain. It's fun reading. I like it, and I think you will, too. Order a copy. 5 1/2 x 8 1/2 paperback 64 pages
Cat. no. 4945 \$4.95



Fantastic Collection of Hints & Tips from 36

Partial Contents

•SW Receivers for 110 VAC •Operation •AC-DC Receivers •Battery Type SW Receivers •Short-Wave Antennas •Antenna Hints •Short-Wave Converters •Pre-Amplifiers •Miscellaneous SW Hints •Beat Oscillators •Power Supplies •Audio Amplifiers •A Folded Doublet to Save Space •How to Get Best DX •Simple 1-Tube Booster •A Twin Pentode Receiver for the Beginner •Kinks for SW "Fan" •Easy-to-Build Short Wave Transmitters •Code Practice Oscillators •5-Meter Receivers •"Ham" Kinks



HOW TO BECOME A RADIO AMATEUR (1930) by the American Radio Relay League reprinted by Lindsay Publications

In 1930 thousands of people were not only fascinated by the arrival of broadcast radio, but by the magic long distance communication possible through short-waves. This simple booklet was intended to draft many of those people into the hobby of ham radio.

HOW TO BECOME A Radio Amateur Build a 1930 Ham Radio Station!

Here you'll discover the amateur bands as they then existed, how to learn Morse code, how to build a two-tube (UV-201-A) bread board regenerative receiver for the 80 meter band, an oscillating transmitter using a UX-210 tube, an AC power supply, tips on setting up the radio station, and finally how to operate it.

Not only is this great nostalgia, it is also quite practical should you want to build a copy of the regenerative receiver. You may want to build a copy of the transmitter for display or occasional demonstration, but you probably wouldn't want to use it on the air.

Discover 1930 ham radio. Build early equipment. Lots of fun reading. Low cost. Get a copy.

8 1/2 x 11 booklet — 32 pages

Cat. no. 20226

\$2.95



1001 RADIO QUESTIONS AND ANSWERS — 1926

edited by Leon L. Adelman of
Radio News Magazine
reprinted by Lindsay Publications

Back in '26, readers of Radio News Magazine were building their own sets. Many of them wrote the editors with questions for which they needed answers, some very simple, others quite technical. The questions along with expert answers were printed in the magazine for other readers. In 1926 the best questions and answers were compiled into this enjoyable book.

Chapters include: miscellaneous circuits, popular circuits, tube data, transmitting circuits, current supply, amplifiers, antennae, and miscellaneous apparatus.

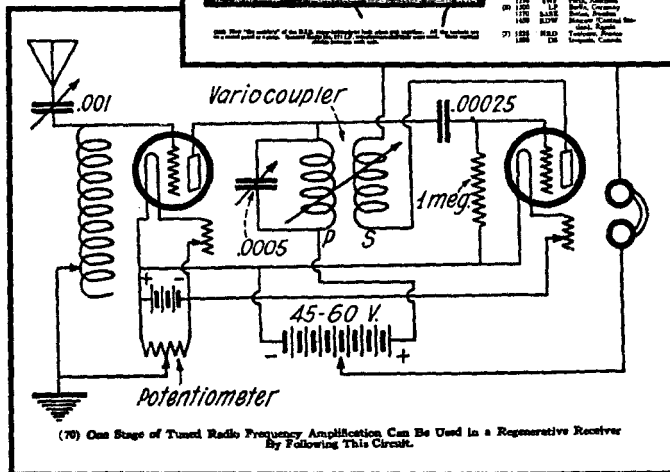
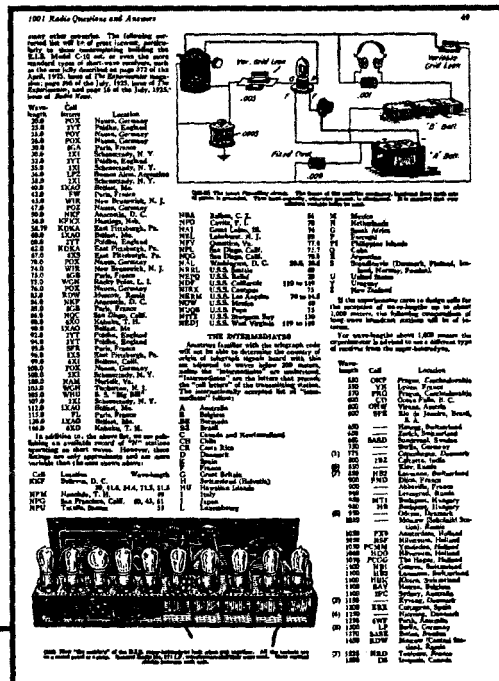
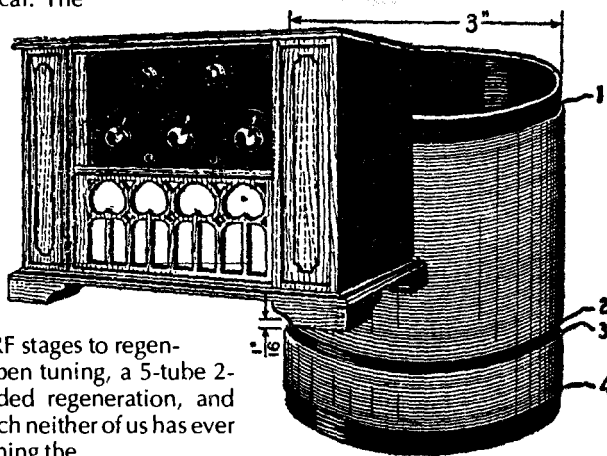
You'll see circuits for adding RF stages to regenerative receivers, circuits to sharpen tuning, a 5-tube 2-dial TRF set, circuits for cascaded regeneration, and dozens of other ideas some of which neither of us has ever seen. You get discussions concerning the use of Litzendraht wire for coil winding, new fangled superheterodynes, wave-trap design, and the inverse duplex receiver (whatever that is?!).

You'll find the schematic for the Universal Plio-6 receiver capable of handling everything from 35 to 3,500 meter wavelengths. Another reader wanted info on the new DeForest F-5 receiver, and he got it. And there's so much more.

You get page after page of radio diagrams, most of them related to receiving. And this is unusual stuff — the nitty-gritty details that you generally don't find in how-to books because it's so specific. Yet, these details often contain hints, tips, and secrets the old-timers acquired by experience and then took with them to their graves. You may find just about anything here.

This is another fascinating, easy-to-read book that will keep you occupied for hours. The original is on really cheap paper that is yellowed and disintegrating. A couple of pages actually have a couple of small holes (imagination will be required during reading). This book is rapidly going to its own grave, so it's time to reprint it. It's something that should not be lost. That means that it's something you should have in your reference library. Order a copy today! 8 1/2 x 11 paperback 96 pages
Cat. no. 21001
\$8.95

1001 Radio Questions & Answers



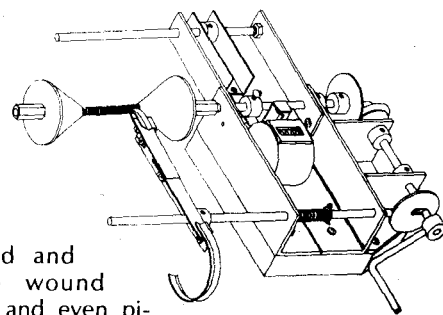
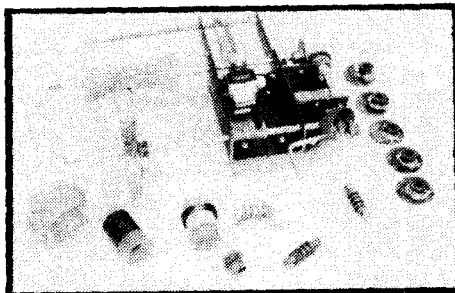
Build a Coil Winding Machine

BUILD A UNIVERSAL COIL WINDING MACHINE

by David J. Gingery

Just a few years ago, experimenters could buy two or three simple hand-operated affordable coil winders. I haven't seen any of them advertised lately. You certainly can wind coils by hand, but if you're going to do any serious experimenting with old-time shortwave circuits, a coil winder is worth having.

Dave will show you how to build a coil winder from common, easily-obtained materials. Although it may look complex, it really is not. You'll find that it is easy to build. You don't need to be a mechanical genius, or need expensive tools. Yet this amazing little machine will professionally wind universal and honey-comb coils, single layer and multi-layer solenoids, close-



wound and space wound coils, and even pi-spaced coils such as used for RF chokes and transformers.

This is a typical Gingery how-to book—loaded with illustrations, dimensions, and step-by-step text that is so detailed it almost holds your hand! Excellent publication. A serious experimenter should have a copy of this and the winder it describes. Order a copy. It's excellent. 8 1/2 x 11 booklet 24 pages Cat. no. 386

\$8.95

MEISSNER MANUAL! Famous Kits from 1943!

MEISSNER "HOW TO BUILD" INSTRUCTION MANUAL (1943)
by Meissner Manufacturing Company
reprinted by Lindsay Publications

Here you get a compilation of the instructions needed to build electronic kits sold by the Meissner Company, being "Fully illustrated with charts, radio formulae, schematic circuit diagrams, and pictorial wiring diagrams."

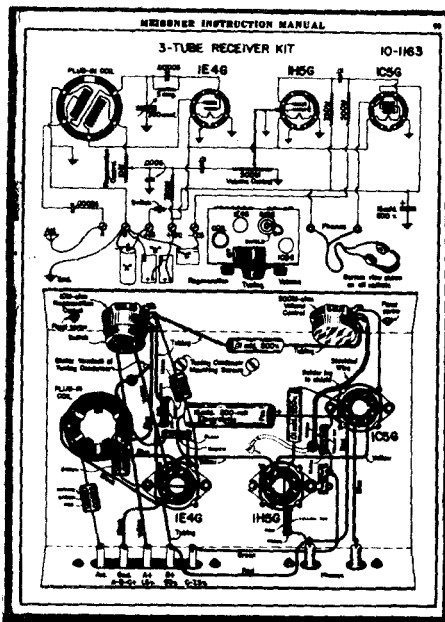
You get general chapters on radio coils, antennas, and FM. Then you discover chapters on a FM-AM receiver, FM adapter, 5-band hi-fi superhet, the Custom All-Wave "9" (4-band hi-fi superhet), 8-Tube "Combination" Receiver, 7-tube AC "Utility" Broadcast set, 7-Tube Broadcast Police and Shortwave Receiver, 5-Tube AC TRF set, Two-Tube AC-DC Midget receiver, a three-tube version, another two-tube version, a Portable Phono Recorder, Hi-Fi Public Address Tuner, Wireless Phonograph Oscillator, Signal Calibrator, the famous Deluxe "Signal Shifter," the "Signal Spotter," the "Traffic Master"—a 14-tube 5-band Communications Receiver, the "Traffic Scout"—a 9-tube 5-band Communications receiver, and more. I count 36 different sets.

You get fairly good step-by-step how-to, the schematic, a pictorial wiring diagram showing the actual components and how they were laid out, adjustment and operating instructions.

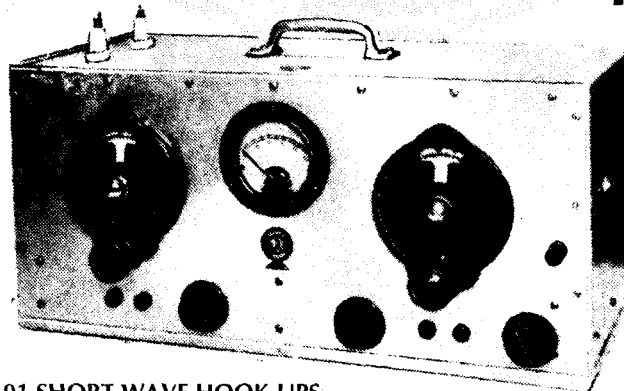
This is octal tube equipment that still turns up at hamfests and flea markets. Great info for restoration and building from scratch. Fun! Get a copy! 8 1/2 x 11 paperback 168 pages

Cat. no. 20633

\$9.95



101 ShortWave Hookups



101 SHORT WAVE HOOK-UPS
by Short Wave Craft Magazine

I never get tired looking at old radio diagrams. I'm amazed at how simple equipment could perform so well! I guess that's why I like this circa 1935 circuit book.

"This book has been prepared in response to many requests for a compilation of short-wave circuit diagrams which have appeared in ShortWave Craft magazine during the past few years. Where ever possible, complete parts lists have been given with the diagrams and, in some cases photographs of the equipment are also included...."

This is one big, fun picture book of radio circuits. It's broken into six broad sections entitled Straight S-W Receivers, S-W Superhetrodynes, Super-Regenerative Receivers, AC-DC Receivers, Miscellaneous, and Transmitters. Unless I counted wrong, I counted 91 different circuits.

Wall-to-wall fun. You'll like it. Order a copy. 7 1/4 x 9 1/2 paperback 72 pages

Cat. no. 20382

\$7.95

Some of the circuits you'll find:

The Mono Coil 2
Ham-Band Pee-Wee 3 Tuber
The Pal 2-Tube Portable
The Electrodyne 1-Tube Set
A Dual Regeneration Control Set
An Advanced 5-Tube Receiver
Master Composite 4
Short-Wave Thrills on 2 Tubes
A 4-Tube Superhet
The Globe Girdler
Mitchell 7-Tube Superhet
Ultra Seven Portable All Wave
SuperHet
Short-Wave Megadyne
An Improved Super Regenerator
The 53 1-Tube Twinplex
Building a 2-Tube Oscillodyne
A Balanced-Detector Super-Regenerator
A 5-Tube AC Oscillodyne Set
A 5-Meter Super-Regenerator
A German SW Set
A Symmetrical Input Super-Regenerator
A 2-Volt 3-Tube Ham Set
5-Meter Transmitter and Receiver
and much more....



Radio Operator!

EDDY'S RADIO OPERATOR

by Lt Myron F. Eddy

reprinted by Lindsay Publications Inc

Through the years the ARRL has continuously published excellent books on becoming a radio amateur. Here's "How to Become an Amateur Radio Operator and Secure a U.S. Government License including How to Learn the Code, General Radio Theory, Questions and Answers Covering the License Examination" published in 1934 by Short Wave Craft magazine.

Some of this is history – just fun to read. Some is radio theory but with vacuum tubes not transistors. Some is construction of radio receivers such as the 3 tube band-spreader, the superheterodyne, and others. You'll even get a look into the secrets of the Hammarlund "Comet Pro".

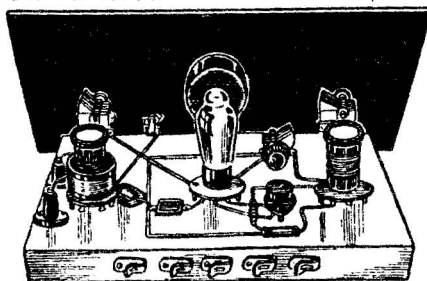
You'll learn about code and phone transmitters including construction of a breadboard push-pull code transmitter and early crystal controlled phone transmitter with amplifier stage. The power supply, modulators and other pieces fit into an impressive homemade wooden rack mount transmitter guaranteed to impress (or scare) your 1934 neighbors!

In the back are a few ads including one for the famous National SW-3 regenerative receiver, the Kolster Model K-5 amplifier, and National's BM 3" midget Velvet-Vernier dial.

This is fun reading and great info on early receivers and transmitters. It gives a view of amateur radio as seen from outside the ARRL. You might not want to put the transmitters on the air, but the receivers would be fun to build, and learning the code is still very valuable. Fun reading. Worthwhile addition to your collection. Order a copy! 7 1/2 x 9 1/2 paperback 72 pages

Cat. no. 20730

\$5.95



BE A WIRELESS MAN!

THE WIRELESS MAN – HIS WORK AND ADVENTURES ON LAND AND SEA

by Francis A. Collins

reprinted by Lindsay Publications

"Send out the call for assistance," said the captain [of the Titanic].

"Which call, Captain?" Phillips asked.

"The regulation international call for help." And the captain hurried away.

The C.Q.D. was instantly flashed out with the entire force of the apparatus, which was the most powerful then afloat. This continued for five minutes without receiving an answering call, when the captain again appeared in the doorway.

"What are you sending?" he asked.

"C.Q.D.," Phillips replied, suiting the action to the words.

"Send the S.O.S.," said the captain...



Send the S.O.S.!



Above: Interior of a modern wireless station Left: Woman wireless operator on shipboard

You can travel back to 1912 and get a first hand tour of the new wireless radio stations that were relaying Morse code signals everywhere. This was a part of "Every Boy's Library" and was the Boy Scout Edition. That means this book is fast, interesting reading with plenty of fascinating illustrations.

You can be the wireless boy, stand in the wireless room aboard ship and watch the operator test his equipment prior to sailing from the pier in New York. You can look through the log and listen in on the coded signals that the wireless operators used.

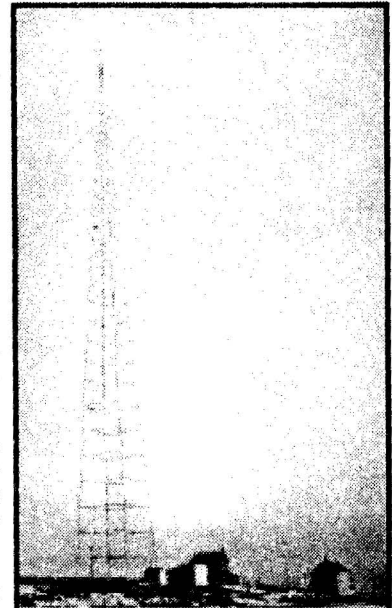
Chapters include Across the Atlantic, The Wireless Boy, How It Works, Talking Across the Atlantic, Some Stirring Wireless Rescues, Novel Uses of Wireless, Wireless in the Army, Wireless in the Navy, The Wireless Detective, and Three Heroes of the Wireless (includes the recent Titanic sinking).

Other books can tell you how to building a spark-gap radio station and even how to use it. Here you're in the middle of the exciting action as skilled operators put the apparatus to work. This is written to excite boys into exploring the new world of radio, and it will excite you, too.

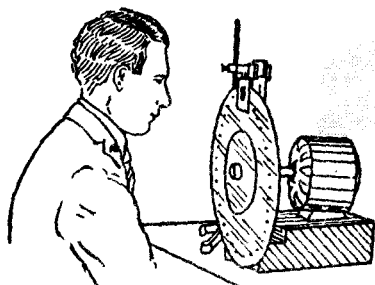
Get a copy of this. Great, enjoyable reading. Just plain fun. Excellent illustrations. Unusual and worth having. Order one! 5x7 paperback 251 pages

Cat. no. 21125

\$11.95



Wireless station at Duluth, working over the Great Lakes



EXPERIMENTAL TELEVISION

by A Frederick Collins

reprinted by Lindsay Publications

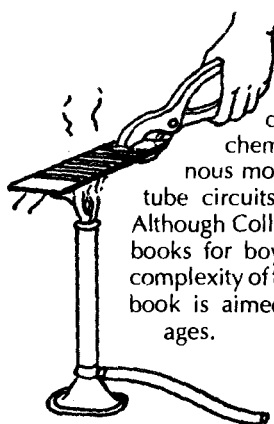
Build yourself a television station! No, not with iconoscopes, vidicons, nor CCD's, but with those crazy scanning discs that Nipkow devised. Go back to 1932 and let Collins show you "a series of simple experiments with television apparatus and also how to make a complete home television transmitter and television receiver."

Chapters include experiments with light, with vision, with the scanning disk, with the photo-electric cell, with the amplifier tube, with glow tubes and neon lamps, with electric waves, with synchronism, with cathode rays and the oscillograph tube, how to make a television transmitter, and how to make a television receiver. And it comes complete with 185 illustrations by author himself.

You'll learn how to fabricate the scanning

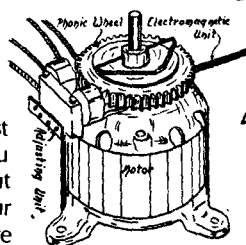
EXPERIMENTAL TELEVISION

"a series of simple experiments with television apparatus and also how to make a complete home television transmitter and television receiver."



discs, synchronize them, make a selenium cell (probably with dangerous, toxic chemicals), use synchronous motors, build vacuum tube circuits and much more. Although Collins is known for his books for boys, because of the complexity of this equipment, this book is aimed at readers of all ages.

If you're lazy (or just want top rate quality), you can buy a Camcorder. But if you want to impress your neighbors and reinforce your reputation for being

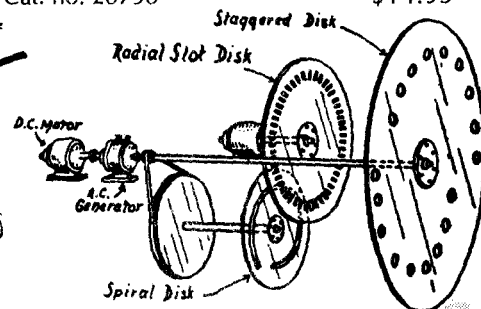


the local mad scientist, build this 1932 vintage TV station. You'll hear- "How did you know how to do that?" Don't tell them you read it in a book! Make 'em think you're Tesla reincarnated. Careful, though! If you over do it, they might have you put away!

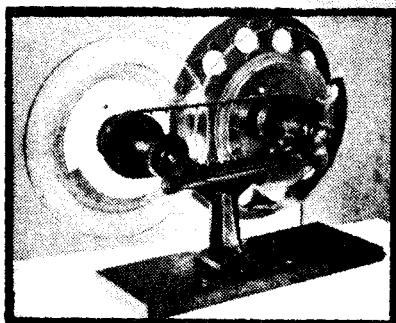
Fascinating book. It's hard to believe that TV engineers even seriously considered mechanical scanning. Rare book. If you're lucky enough to find an original of this, it will cost you many times what I'm asking. Worth having. Order a copy today. 5 1/2 x 8 1/2 paperback 313 pages

Cat. no. 20790

\$14.95



VERY EARLY FAX & TV



VISION BY RADIO RADIO PHOTOGRAPHS RADIO PHOTOGRAPHS

by C. Francis Jenkins

Go back to 1925 and discover the latest devices developed to transmit photographs, in other words, the earliest fax machines and the earliest televisions!

This is an amazing book! You get details on the electrical components that ex-

isted at the time, the tests that had been tried, correspondence from famous people, and historical notes.

The most interesting section, I think, is illustrated review of existing machines: Nipkow & Sutton, the Amstutz system, the Electrograph, the Baker machine, the Dr. Korn Machine, the Rignoux and Fournier Scheme, the Belin machine, the AT&T machine, RCA's machine, the Braun Tube receiver, pictures by radio in natural colors (!), prismatic disc machines, the Jenkins prismatic ring, Jenkins synchronizing forks, Jenkins picture-strip machine, Jenkins Duplex machine, talking machine photograms, radio vision (television), Jenkins high speed camera, and more.

Obviously, this book was written and published to glorify Jenkins and Jenkins Laboratories Inc (no doubt so he could make more money). But it delivers more photos, drawings, and patents on early fax and TV equipment than I've ever seen anywhere before.

It's really good, and the price we ask is a mere fraction of what you'd pay for an original if you could find one. Rare information! Excellent book. Get a copy! 5 1/2 x 8 1/2 paperback 140 pages

Cat. no. 20200

\$9.95

VIDEO SCRAMBLING & DESCRAMBLING FOR SATELLITE & CABLE TV

by Graf & Sheets

If you have purchased or plan to purchase a satellite dish to capture signals coming from the many Earth-orbiting satellites, this book is for you.

You get:

- An understanding of encoding/decoding systems
- The theory and techniques of video encryption and decryption
- An overview of the rules and regulations governing the availability and use of satellite signals, antennas, and programming materials
- Schematics and details for several encoder and decoder projects.

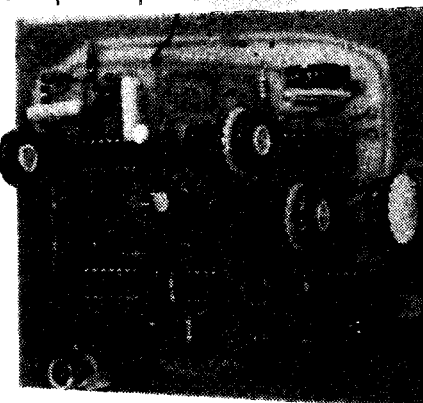
Originally published in 1987, this book provides detailed information on everything from simple cable encryption systems to commercial satellite systems such as VideoCipher II™, the B-Mac System, and even the Data Encryption standard.

Although the authors are quick to point out that the information is not be misused in theft of signal, they have provided a wealth of schematics, printed circuit board layouts, IC chip specs, patent reprints, list of satellites and the scrambling systems they use and much more. This is a quality master reference that any video/satellite fanatic will find useful. Order a copy today! 8 1/2 x 11 paperback 246 pages

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\$24.95

UNSCRAMBLE VIDEO!





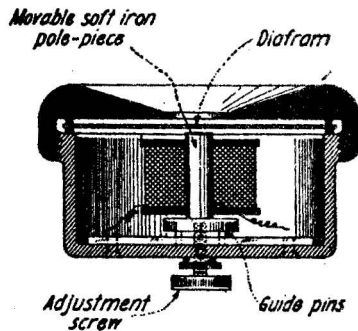
THE HOW AND WHY OF RADIO APPARATUS

by H. W. Secor, E.E.
reprinted by Lindsay Publications

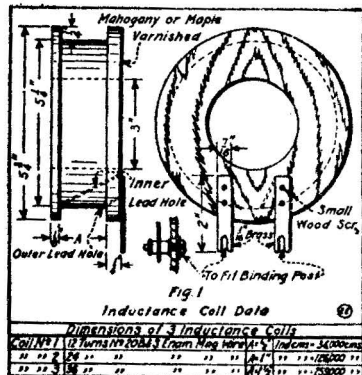
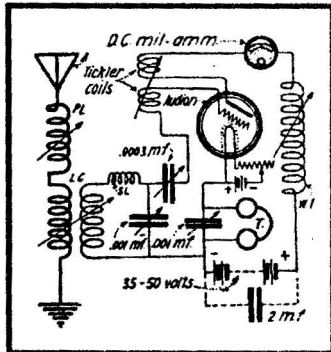
Back in 1922 when short-waves were the newest high tech frontier being explored, everybody and his brother was wanting to build a shortwave set and tune in on the fun. Magazines and books could tell you how to bolt together a set but rarely told you anything about why or how it worked. If you wanted to modify it or improve it, you would probably use a trial-and-error engineering approach. And that usually doesn't work very well.

Secor set out to explain to his readers how components worked individually and together, and without using heavy math to do so. This book provided the "practical theory" experimenters needed.

Chapters include: The Induction Coil, The Transformer, Radio Transmitting Condensers,



The How and Why of Radio Apparatus



Spark Gaps, Radio Transmitting Inductances, Radio Receiving Tuners, Radio Receiving Condensers, Detectors, Telephone Receivers, Radio Amplifiers, How to Make and Use a Direct-Reading Wave Meter and Decimeter, Radio Antenna Construction, The Calculation and Measurement of Inductance.

This is great stuff for experimenters old and new. You won't find much in modern books on spark gaps and variometers. A lot of this is quaint reading. You may not want to duplicate the circuits, but you can in your imagination. Building the direct reading wave meter could be fun. And the calculation and measurement of inductance is interesting, too. Tesla coil builders might benefit from some of this info, since a Tesla coil is a primitive radio transmitter.

This is an unusual early radio book that compliments the books that are little more than circuit diagrams. Here, you'll "crawl" inside the head of the old-time builders and learn how they saw the new field of electronics opening up. I like it. I think you will, too. Get a copy! 6x9 paperback 160 pages Cat. no. 21133 \$8.95

VACUUM TUBES in Wireless Communication

VACUUM TUBES IN WIRELESS COMMUNICATION

by Elmer E Bucher

In 1919 radio had proven itself in the just-ended First World War. Radio's future looked bright.

The author explained his purpose in writing this book:

"In preparing the text of this book, the author had two principal objects in view: (1) to provide the Government and commercial wireless operator with a brief and simple explanation of the functioning of the circuits of the vacuum tube, (2) to lay before the experimenter and the practical operator the numerous circuits employed from time to time in the laboratory and in commercial practice.

The Two, Three and Four Element Oscillation Valves are described in detail together with the circuits used in daily practice. Cascade Amplifiers of the latest type for long distance reception are comprehensively treated. Up-to-date circuits for long distance receptions are comprehensively treated..."

This almost all circuit diagrams, many being brand new to me. How about regenerative cascade systems, a modified Weagant Beat receiver, Espenschied's Duplex Wireless Telephone system, or circuits using unusual tubes such as the Dynatron, the Pliodiatron, the K e -

notion, or the Pliotron? Back then, this book described the

cutting of technology as radio began to move away from spark gap code transmission to continuous wave

methods using

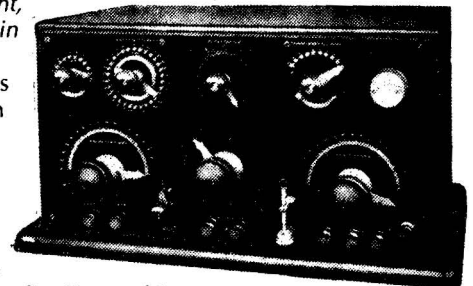
tubes.

This is a great collection of very unusual radio history — something you don't find everyday. 'Course I know a lot of boneheads who would be just as happy if they NEVER found it any day. But don't you be one of them. Consider

Outside of its obvious commercial value, the perfected vacuum tube affords the experimenter a most fascinating field of search. This is well evidenced by the fact that a single bulb with associated tuning apparatus connected to a four wire aerial 200 feet in length permits wireless signals to be received over distances 2,500 to 4,000 miles in daylight, and up to 6,000 miles in darkness."

On the title page is another description that says it all.

"This volume shows over 140 different circuits for the practical use of Vacuum Tubes as Detectors, Radio or Audio Frequency Amplifiers, Regenerative Receivers, Beat Receivers, and Generators of Radio Frequency Currents.



this carefully. Its unusual. 5 1/2 x 8 1/2 paperback 208 pages Cat. no. 20412 \$12.95

GERNSBACK'S EDUCATIONAL LIBRARY

reprinted by Lindsay Publications

In the late 1930's Hugo Gernsback's Radio Publications company in New York published a series of ten shortwave radio booklets to satisfy the public's growing interest in building and operating shortwave sets.

Each booklet is 32 pages in length, is well illustrated, and has a brilliant yellow cover. Each covers a different topic from radio construction to electrical experiments to television.

You'll find these little booklets fascinating reading, full of ideas, and you'll find each to be a slice of early radio history back when radios were built on breadboards with handtools instead of printed circuits.

The original booklets were printed during the Great Depression on inferior quality paper and are now quite rare. But you can get high quality copies on quality paper and enjoy them again.

Order a set today!

NO. 1 HOW TO BUILD 4 DOERLE SHORTWAVE SETS

Build the 2-tube 12,500 mil "Doerle" shortwave receiver and the 3-tube signal gripper. You then get instructions on modifying these two basic radios into a bandspread receiver and an 110 VAC operated version.

Cat. no. 820

\$2.25

NO. 2 HOW TO MAKE MOST POPULAR ALL WAVE 1 AND 2 TUBE RECEIVERS

Build a Megadyne one-tube loudspeaker set, a beginner's 1 tube AC-DC set, a four-in-two all-wave all electric 2-tube set, a super-regenerative single-tube loudspeaker set, a portable 2-tube battery loudspeaker receiver, and a beginners' one-tube all-wave battery set.

Cat. no. 821

\$2.25

NO. 3 ALTERNATING CURRENT FOR BEGINNERS

Study theory, and perform home experiments with AC such as lighting a lamp induction, making a simple electric horn, watch demagnetizer, simple test for motor armature defects, bell-ringing transformer, charging storage batteries from an AC source, simple test for condensers, AC electromagnets, magnetic levitation, simple motors, lamp dimmer, and more.

Cat. no. 822

\$2.25

NO. 4 ALL ABOUT AERIALS

Part one covers receiving antennas with notes on tuned antennas, broadcast antennas, low impedance transmission line, doublets for

shortwave, transposed leadin, a SW antenna tuner, antenna construction, a double-doublet all-wave antenna, doublet installations and more. Part II covers transmitting antennas for amateur stations including the half-wave antenna, output matching circuits, construction, the Zepp, a counterpoise system, and more.

Cat. no. 823

\$2.25

NO. 5 BEGINNERS' RADIO DICTIONARY

A complete 32 page dictionary for beginners. Obviously, most the terms are still in use, but some are not. Brief defini-

GERNSBACK'S EDUCATIONAL LIBRARY

Cat. no. 827

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NO. 9 SIMPLE ELECTRICAL EXPERIMENTS

Build a galvanometer, experimental magnet, simple motor, electric shocker, microphone, arc lamp, electric furnace, arc welder, a home-made key, batteryless flashlight and more. Perform tricks with telephone receivers and experiments with lamps, neon lamps, condensers, talking condensers, static electricity, and more. You'll find a brief section on making a magnet, on rheostats and how to use them, rectifiers, simple measuring instruments, heat or cold

from junction of dissimilar metals, handy wire gauge, musical instruments, and more.

Cat. no. 828

\$2.25

NO. 10 TELEVISION

In 1938 this was high-tech electronics! You get a primer of television,

including details on mirror scanning, Scophony system, and movies for television. Study the kinescope or cathode ray tube and how the sweeping beam is synchronized. Learn about receiver antennas, how TV programs are broadcast, network TV, and even a Scophony system for color television! Quite interesting.

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\$2.25

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Get all five for one lower price. Save \$1.30
Cat. no. 930 \$9.95

PACKAGE NUMBERS 6 THROUGH 10

Get all five for one low price. Save \$1.30.
Cat. no. 931 \$9.95

NO. 6 HOW TO HAVE FUN WITH RADIO

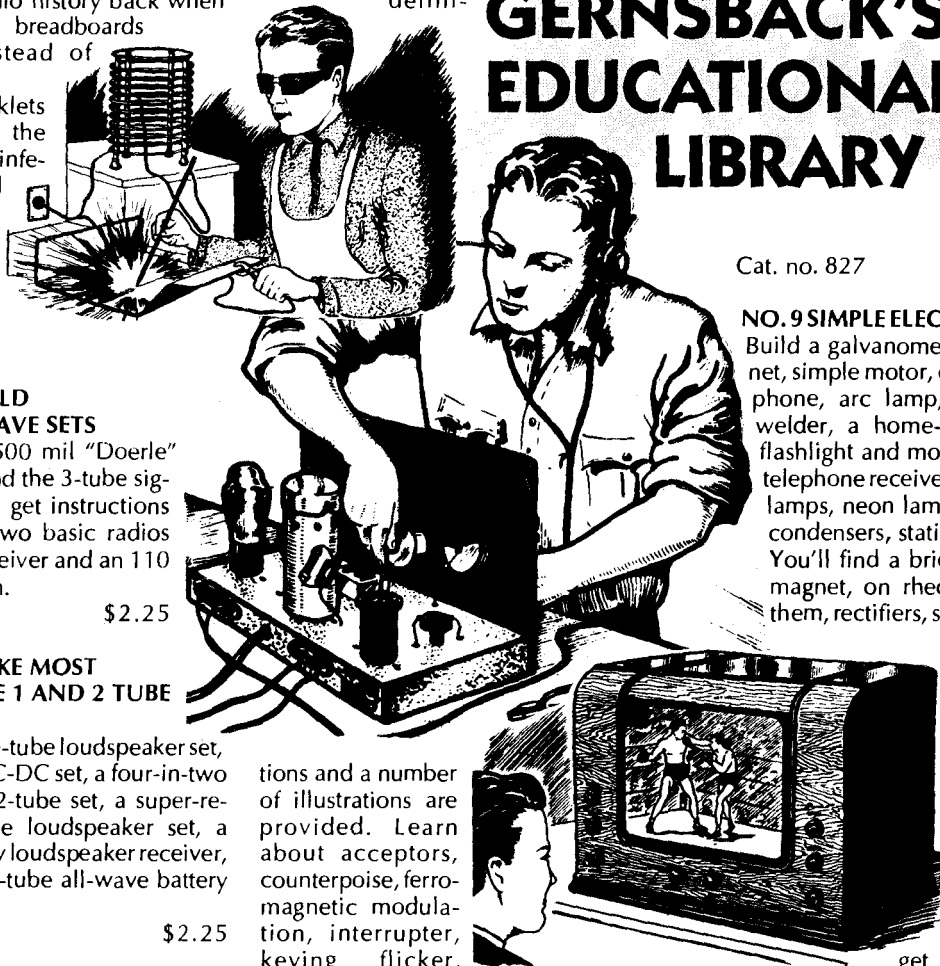
Unusual experiments! Try the "Talking Newspaper" which is nothing more than a loudspeaker made from aluminum foil and newspapers! Also try talking gloves, radio electric chair (put a frying pan in your pants), visual music, dancing to silent music, musical and talking gadgets, the radio dancer, home broadcasting, the door that talked, and more!

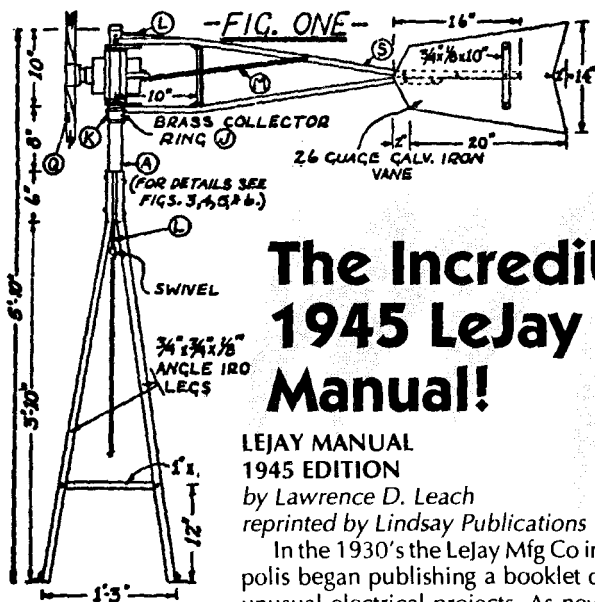
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NO. 7 HOW TO READ RADIO DIAGRAMS

Learn how to translate radio diagrams into physical equipment. You get pictures, defini-





The Incredible 1945 LeJay Manual!

LEJAY MANUAL
1945 EDITION

by Lawrence D. Leach
reprinted by Lindsay Publications

In the 1930's the LeJay Mfg Co in Minneapolis began publishing a booklet describing unusual electrical projects. As new editions came out, new plans were added until by 1945 there were 50 separate "chapters".

Most of the articles in this edition deal with the conversion with now-antique auto generators into 110 volt alternators, other voltage generators and motors. A lot of this info was used in areas of the country that hadn't been electrified. You could buy old generators from auto junk yards, build a windmill, repair old auto batteries, and use the electricity to run homebuilt motors, welders and so on.

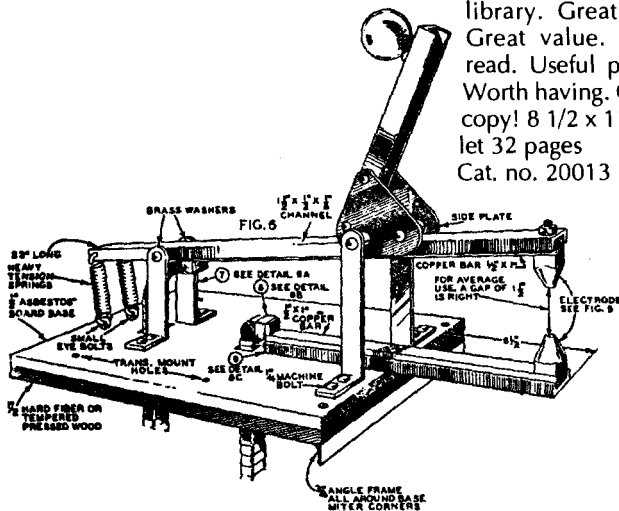
Most of the information in this booklet is now of limited value simply because you can't get the generators listed. But the rewinding data, hints and tips provided can help you in other rewinding projects for other types of generators.



There ARE several projects in this booklet each of which is worth the entire price of the publication. For instance, you can build a small but useful spot welder powered by nothing more than a string of auto batteries. You get plans for an arc welder, a transformer spot welder, a carbon-arc torch, electric bicycle, a water wheel, a windmill and more. Each plan is well illustrated.

This is a manual worth having in your reference library. Great ideas. Great value. Fun to read. Useful projects. Worth having. Order a copy! 8 1/2 x 11 booklet 32 pages Cat. no. 20013

\$6.95



50 Unusual Electrical Projects and Plans

- Plans for 110 Volt AC Light Plant made from Ford Model "T" Generator
- 200 Watt AC Generator for Automobile Made from Ford Model "A" Powerhouse
- A 6 Volt Slow Speed Generator (with plans for all-metal windmill)
- 6 Volt & 12 Volt Slow Speed Generators from Dodge "G" or "GA" Northeast Generator also from other Generators
- A 32 volt slow speed wind light Plant Generator
- One 32 Volt Motor, One 110 Volt Motor, One 32 Volt Generator, One 110 Volt Generator from Dodge Generator
- How to Make a Grinder, Series Motor, Constant Speed Motor, A Universal AC or DC Motor and a Soldering Iron
- A 75 to 110 Ampere Arc Welder Made from Dodge "G" or "GA" Generator. Also Dual Welders.
- Pendulum Type Fence Controller made from Ford "T" Coil
- Plans for Building a Complete Wind Light Plant Including Tower, Propeller and Generator Charger
- A 110 Volt AC Light Plant Generator
- A "B" Eliminator For Your Battery Operated Radio
- An Automobile Generator Booster Control
- A 6 Volt Slow Speed Generator from Standard 14 Slot 28 Bar Generator
- A 32 Volt Constant Speed Generator made from Ford "T" Generator
- A 2 Volt Slow Speed Generator from Standard 14 Slot 28 Bar Generator
- How to Convert A 6 Volt Cut-Out for 2 Volt Operation
- Directions for Repairing Your Own Batteries
- A Water Wheel Made from Old Automobile Wheel
- An Electric Outboard Motor from Old Ford "T" Generator
- A Gas Engine or Motor Driven Generator with Drawings in Detail
- An Armature Growler for Testing Auto or Slow Speed Armatures
- Two 32 Volt Series Motors from Dodge "G" or "GA" Generator
- A 32 Volt Heavy Duty Motor made from Dodge "G" or "GA" Generator
- A Bench or Breast Drill for 6, 12, or 32 Volts from "T" Generator
- A 6 Volt Motor for Drill Press, Washing Machines, etc. made from Model "T" Generator
- One 12 volt Motor and One 32 volt Motor Made from Model "T" Generator
- Two 6 Volt Generators from the Dodge, also general information
- A 110 V. or 220 VAC Portable Transformer for Arc Welding
- A 110 Volt Spot Welder — 1 Kw. Input Normal Draw 10 to 11 Amps
- A Direct Drive 32 Volt Wind Plant — All Metal Construction
- A Battery Spot Welder
- Armature Diagrams for Autolite, Bosch-Autolite and Bosch Generators
- Armature Diagrams for Delco, Delco-Remy, & Remy Generators
- Armature Diagrams for Ford A, B and V8 Generators
- Armature Diagrams for Northeast Generators
- 38 Armature Diagrams for Atwater-Kent & Dyneto Generators
- Armature Diagrams for Leece-Neville Generators
- Armature Diagrams for Wagner Generators
- Armature Diagrams for Westinghouse Generators
- Plans for Installing Lights on Your Tractor
- Two Types 110 Volt AC Insect Exterminators
- An Electric Scooter Using a 6 or 12 volt Battery for Power
- An Electric "Go Bike" Using a 6 or 12 volt Battery for Power
- A Carbon Electrode Holder for Soldering, Brazing and Light Welding Direct from Six-volt Storage Batteries
- Ball Type Fence Controller Made from Ford "T" Coil
- 110 Volt AC 500 Watt Self Excited Generator from Dodge Model "G" or "GA" generator
- 110 Volt AC 60 Cycle 1/2 HP Synchronous Motor from Dodge Model "G" or "GA" Generator
- An AC Welding Transformer Using Dodge Generator Coils

Appendix: Windpower Information, Definitions, etc

Build a Solar Cell that really works!

HOW TO BUILD A SOLAR CELL THAT REALLY WORKS

by Walt Noon

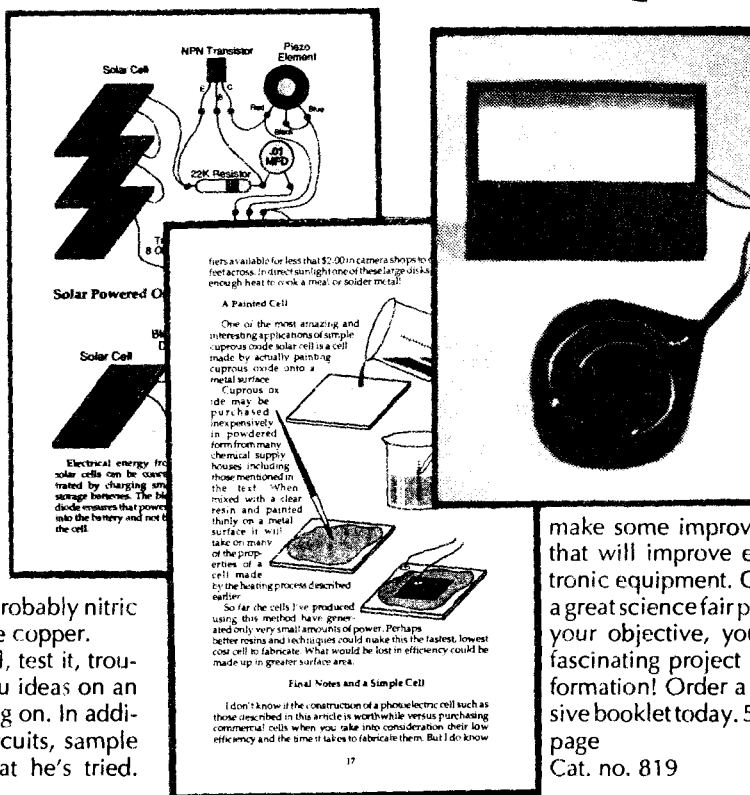
Yes! You CAN build a solar cell that converts sunshine into electricity. And it's really quite easy.

Modern high efficiency solar cells based on silicon crystals are difficult and dangerous to manufacture. You would need exceptionally expensive equipment just to perform the most basic experiments. But fortunately there is another method.

Walt Noon will show you how to quickly and inexpensively build a copper oxide photo cell. Admittedly its overall efficiency doesn't come close to modern silicon cells, but neither does the cost. You can crank out cells for pennies. Connect many cells in parallel and series, and you can generate surprising amounts of power.

The process requires only simple tools. The chemicals, like all chemicals, can be dangerous if mishandled, but the worst is probably nitric acid which is used to thoroughly clean the copper.

He'll show you to make a working cell, test it, troubleshoot it if necessary, and even give you ideas on an experimental painted cell that he's working on. In addition, he'll give you schematics of test circuits, sample applications, and interesting projects that he's tried.



You'll also get names and addresses of suppliers.

That author is not a professional, but he has safely built and used these solar cells, and he's willing to show you how its done. You get a 24 page booklet with many drawings, schematics and photographs that describes the relatively simple process in detail.

Build solar cells! Perhaps you can

make some improvement in the process that will improve efficiency. Build electronic equipment. Charge batteries. Build a great science fair project. No matter what your objective, you'll find this to be a fascinating project worth trying. Rare information! Order a copy of this inexpensive booklet today. 5 1/2 x 8 1/2 booklet 22 page

Cat. no. 819

\$4.95

PHOTOCELLS and Their Application

PHOTOCELLS AND THEIR APPLICATION

by Zworykin and Wilson

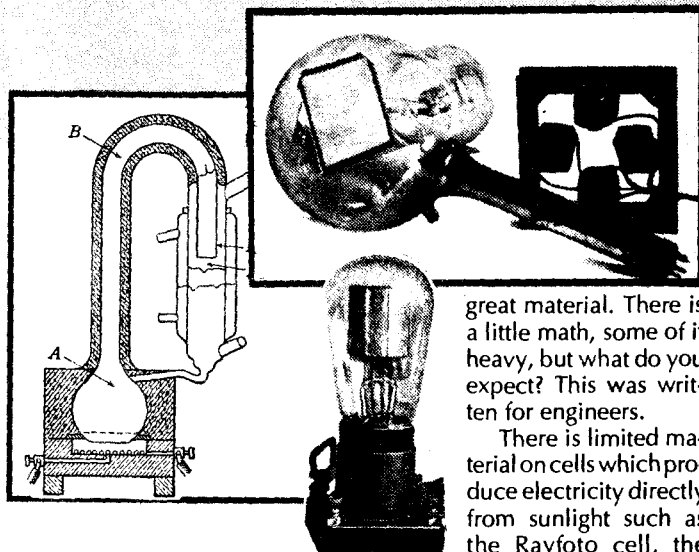
reprinted by Lindsay Publications

Here's a fascinating book! Zworykin is credited with making television practical by developing the iconoscope for RCA that allowed the experimental TV broadcasts before World War II, and with the extremely sensitive image orthicon that made modern TV possible after the war. (I have a couple of each of these old tubes in the warehouse. They're beautiful devices!) This book was first copyrighted in 1930, with this second edition carrying a 1934 copyright.

You get a complete education in photocell state-of-the-art as it existed in the early 1930's. This is the base material that lead us to television and the solar cell technology.

Chapters include historical introduction, radiant energy, photo-emissive effect, photosensitive films, material and apparatus for making photocells, general methods of preparing photocells, the vacuum photocells, the gas-filled photocell, photo-conductive photocells, photo-voltaic cells, photocell output and amplifying tubes, optimum outputs of photocells, the problem of amplification, special light-sensitive devices, the photocell in photometry and colorimetry, the photocell in sound movies, the photocell in facsimile, the photocell in television, miscellaneous applications, and photocells in the future.

You get great illustrations from vacuum pumps, cesium-oxide cells, and amplifier schematics, to a Zworykin multiple cell, Nipkow TV system, and early FAX machine. This is easy-to-read and covers



great material. There is a little math, some of it heavy, but what do you expect? This was written for engineers.

There is limited material on cells which produce electricity directly from sunlight such as the Rayfoto cell, the

Photolytic cell, the Ruben cell, the Grondahl-Gieger cell (a copper oxide cell the plans for which are offered elsewhere in this catalog), the Sperrschicht cell, and others. You won't get how-to-build instructions, but you might very well get the bits and pieces that lead you off into a new direction of experimentation, or provide you with new ideas to research in technical literature.

This is a great book presenting rare information. And it's written by a giant in the history of television. It's easy and fun to read. The illustrations are great. Yes, you know I'm strange, but I think that you'll enjoy reading this as much as I do. I like it. I think you will too. 5x7 paperback 348 pages

Cat. no. 20560

\$11.95

MANUAL OF FORMULAS, RECIPES, METHODS AND SECRET PROCESSES

edited by Raymond Wailes
reprinted by Lindsay Publications

Here's a great low cost collection of hundreds of formulas on just about every subject you can imagine compiled from the pages of Popular Science Magazine and published in 1932.

You can make soap bubble liquids, solidified gasoline, waterproof matches, lacquer for brass, silver solder, photographic printing paper, slow-drying putty, black-board paint, thermite welding mixtures, pewter alloy, garden sprays, soaps, preparations for dance floors(?), concrete waterproofing compound, fireworks, cosmetics, adhesives and much more.

You'll learn how to mix up compounds for polishing and plating metal. Learn how to blacken brass, blue steel, to make silver nitrate from old spoons, mix up low temperature alloys, dry flowers, brew wine, re-ink typewriter ribbons, make blueprint paper, dye cloth, make flypaper and much more.

Unlike other formularies, this one is new enough to be useful and old enough to have unusual formulas. And the price is quite reasonable compared with the large volumes which are interesting but often contain many formulas that are of little practical value. An interesting book of definite value. Worth having. Order a copy today. 4 1/2 x 8 paperback 250 pages
Cat. no. 20366

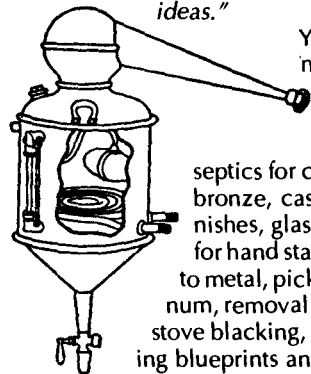
\$9.95

HENLEY'S FORMULAS

HENLEY'S FORMULAS FOR HOME AND WORKSHOP

edited by Gardner D. Hiscox, ME

This is a reprint of a standard handbook that first appeared in 1907 and was later revised in 1927. You get "10,000 scientific formulas, trade secrets, food and chemical recipes, and money saving ideas."

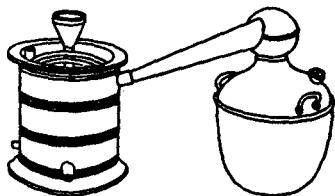


You get formulas and instructions for making everything from acid-proofing compounds to preservation of yeast. You get a big thick hardcover book (one helluva bargain) covering anti-septics for caged birds, aquarium putty, beer, blue bronze, casket trimmings, clock oil, enamel varnishes, glass etching, marine glue, fireworks, inks for hand stamps, jeweler's alloys, attaching rubber to metal, pickling brass like gold, polishes for aluminum, removal of corns, sarsaparilla beer, skin cream, stove blacking, coloring billiard balls red, waterproofing blueprints and thousands more.

The index is set in really small type and is 23 pages long! Some of the formulas, no doubt, are not too useful anymore. And many of these formulas may be downright dangerous. So you're on your own.

If you're into this kind of thing, get a copy. You're a fool if you don't. It's not all that hard to find an original copy, but this price is a give away! Standard volume of old formulas. Order one now. 6x9 hardcover 809 pages
Cat. no. 578

\$12.95



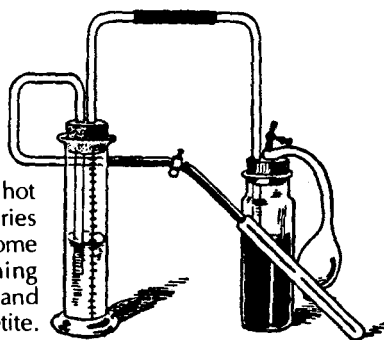
A THOUSAND AND ONE FORMULAS - THE LABORATORY HANDBOOK FOR THE EXPERIMENTER

by Sidney Gernsback
reprinted by
Lindsay Publications

Back in 1920 people were hot to set up their own laboratories and invent something and become rich. Experimenter Publishing Company published books and magazines to whet their appetite.

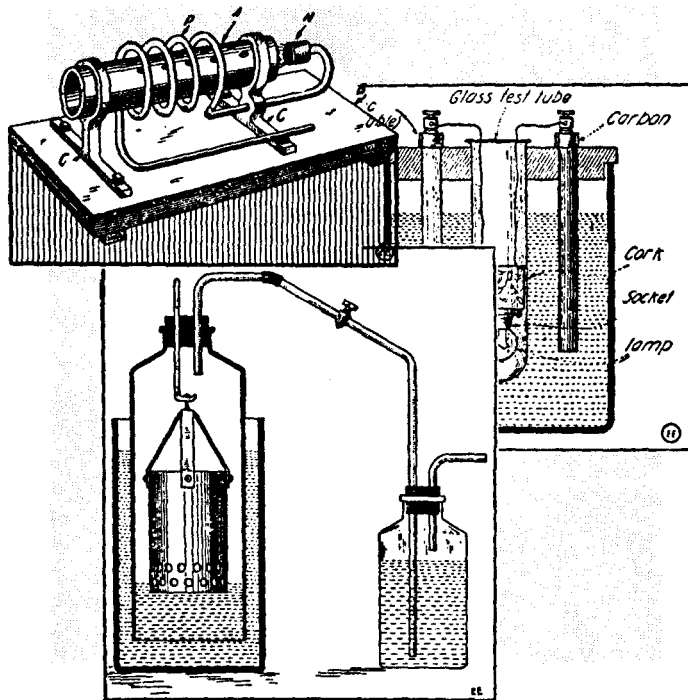
Here you get formulas on cements and glues, compositions of all kinds, glass and glass working, inks, leather polishes, metal-craft, perfumes, soaps, photography, blue-print and other papers, plating, pyrotechny, polishes and stains, varnishes and paints, cleaning compounds, wood-craft, chemical lab hints, mechanical lab hints, electrical lab hints, miscellaneous formulas and an appendix.

Not everything here is useful in my opinion, and some of it is downright dangerous. Some of this looks like it came out of the Boy Mechanic books. Learn how to convert coin silver into pure silver, formulas for solders, lithographic ink, how to make a gasoline torch, recipes for killing flies, an experiment with thermit, hand grenades



1001 FORMULAS

A Laboratory Handbook for the Experimenter



???, flashlight powder like the old photographers once used, methods to copper-plate carbon motor brushes, and on and on.

A lot of this is quaint, and not directly useful. It's for kitchen chemists. But a few of the formulas and ideas are worth the entire price of the book. If you're trying to build a master reference library of unusual secret formulas, this book is certainly worth considering. Check it out. I wouldn't have reprinted it if I didn't think it had merit. Fun reading if nothing else. Get a copy! 5 1/2 x 8 1/2 paperback 160 pages
Cat. no. 20811

\$8.50

CONTENTS

• **Division I** — Chemical Metallurgy; Alloys; and Preparations Made and Obtained from Metals. Iron; Pig or crude iron; Malleable, bar or wrought-iron; Steel; Iron Preparations; Cobalt; Nickel; Copper; Preparations of Copper; Lead; Preparations of Lead; Tin; Preparations of Tin; Bismuth; Zinc; Preparations of Zinc; Cadmium; Antimony; Antimonial Preparations; Arsenic; Quicksilver or Mercury; Preparations of Mercury; Platinum; Silver; Gold; Manganese and its preparations; Permanganate of Potassa; Aluminum; Magnesium; Electro-Metallurgy

• **Division II** — Crude materials and products of chemical industry — Carbonate of Potassa; Saltpeper, Nitrate of Potassa; Nitric acid; Technology of the Explosive Compounds — gunpowder, and the chemistry of fireworks or pyrotechny; Nitroglycerine; Gun-cotton; Common salt; Manufacture of Soda — native soda; Soda from plants or soda-ash; Soda Prepared by Chemical Processes; Preparation of Iodine and Bromine; Sulphur; Sulphurous and Hyposulphurous Acid; Manufacture of Sulphuric Acid; Sulphide of Carbon; Hydrochloric Acid and Glauber's Salt, or Sulphate of Soda; Bleaching Powder and hypochlorites; alkalimetry; Ammonia and ammoniacal salts; Soap making; Boric or boracic acid, and borax; Production of alum, sulphates of alumina, and aluminates; Ultramarine

• **Division III** — Technology of Glass, Ceramic Ware, Gypsum, Lime & Mortar Glass manufacture; Ceramic or earthenware manufacture including hard porcelain, tender porcelain, stoneware, Fayence ware, common pottery, brick and tile making; Lime and lime-burning; Mortar including common or air-setting mortar and hydraulic mortar; gypsum and its preparation

• **Division IV** — Vegetable Fibers and Their Technical Application — Hemp; Cotton; Paper making — hand paper, machine paper, pasteboard and other paper; Starch; Sugar manufacture; Cane Sugar; Beet-root; sugar; Grape sugar; Fermentation; Wine-making; Beer-brewing; preparation or distillation of spirits — preparation of vinous mash and distillation of the vinous mash; Bread baking; Manufacture of vinegar; Preservation of wood; Tobacco; Technology of essential oils and resins; Cements, lutes and putty

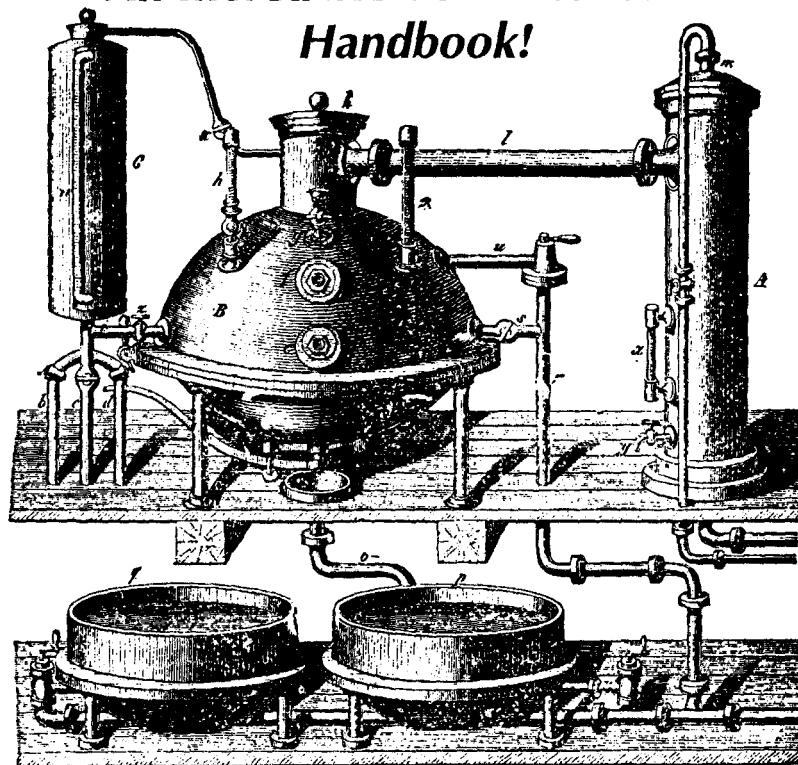
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• **Division VI** — Dyeing and Calico Printing — Aniline colours; Carboic Acid colours; Naphthaline pigments; Anthracen pigments; Pigments from Chinchonine; Red Pigments occurring in plants and animals; Blue dye materials; Yellow dyes; Bleaching; Dyeing of spun yarn and woven textile fabrics; Printing of woven fabrics

• **Division VII** — Materials and Apparatus for Producing Artificial Light — Artificial light from candles; Illumination by means of lamps; Gas; Paraffin and solar or petroleum oils; petroleum

• **Division VIII** — Fuel and Heating Apparatus — Fuel; Wood; Peat; Carbonized peat; Brown-coal; Pit coal or coal; Petroleum as fuel; coke; artificial fuel; gaseous fuel; heating apparatus; heating dwelling houses; boiler heating and consumption of smoke

An Incredible 1872 Industrial Handbook!



CHEMISTRY

HANDBOOK OF CHEMICAL TECHNOLOGY 1872

by Rudolf Wagner

translated by William Crookes

reprinted by Lindsay Publications

In the 1872 German chemists were world famous, and Wagner's Handbook was the master reference for chemists the world over. This translation of the eighth German edition can be yours for much less than an original copy should you be able to find one.

And what a book it is!

You'll early and/or simple ways of making chemicals, refining metal, formulating glue, paper, dyes or just about anything else chemical in nature. I have never seen such a comprehensive collection of incredible technological detail in a single volume anywhere else.

Want to refine iron ore into steel? Want to make sulphuric acid? And use it to make nitric acid? And use it to make explosives? Care to brew beer? How about a batch of whiskey? A loaf of bread? And on, and on, and on. You get a whole encyclopedia in a single volume — 745 pages of small type with 336 illustrations mostly of manufacturing apparatus.

This is not really a cookbook. You won't find step-by-step instructions. But you will find more detail on a wider

variety of basic essential processes (many of them made obsolete by more complicated processes) than in any other volume. For instance, if you're investigating the tanning of hides, making illuminating gas, charcoal, soap, or anything else, you'll find that this single volume can provide more information in less time than a search through most libraries for a month of Sundays.

Yes, this is an expensive volume, but you actually get more than what you pay for. This is quality. Today we have sophisticated, hi-tech processes that are closely guarded industrial secrets. Here you learn how it was done before large corporations and PhD chemists took over production. Be warned, though. This is old world thinking. You run the risk of poisoning yourself. These methods can be and probably are dangerous.

This incredible classic text will definitely fill a void in your reference library. I've never seen anything like it. And it's almost a sure thing you haven't either. It's expensive, but it's worth every penny and then some. Order a copy. You won't be disappointed. 5 1/2 x 8 1/2 hardcover 745 pages 332 illustrations

Cat. no. 4996

\$29.95

Manufacture of Whiskey, Brandy and Cordials

MANUFACTURE OF WHISKEY BRANDY & CORDIALS

by Irving Hirsch

reprinted by Lindsay Publications Inc

You'll find books on making wine and beer in lots of different places. But finding books on making booze, good, drinkable booze (if there is such a thing...) are almost non-existent. I suspect it has to do with taxes. Making booze is illegal without a government permit. What you get here are the secrets of making booze that you're not supposed to know!

In 1937 the author, a chemical engineer, put together this industrial handbook to teach others how to

produce hard stuff. Prohibition had ended, but the Great Depression hadn't. I guess there wasn't much to do but drink...

Chapters include whiskey, treatment of grain, rye whiskey, distillation of liquors, distillery equipment and appliances, manufacture of brandy, of applejack, of pear brandy, of slivowitz, of fruit brandy, of rum, of gin, of miscellaneous liquors, of cordials, blending, maturing of spirits [very important], artificial maturing of spirits [trade secrets?], clarifying liquors, water, sugar and syrup, coloring and much more.

We're not talking about

small moonshine stills. And dis ain't "white lightnin'" that tastes like liquid fire. This is good stuff. We're dealing with big stills and big processes the way the pro's did it and are probably still doing it. You get diagrams of many different types of stills, condensers, filters and so on. You get recipes for everything from gin to creme de cocoa. You get useful tips on blending scotch whiskeys, problems that occur if whiskey stays in bond too long, problems with sweating casks and much more.

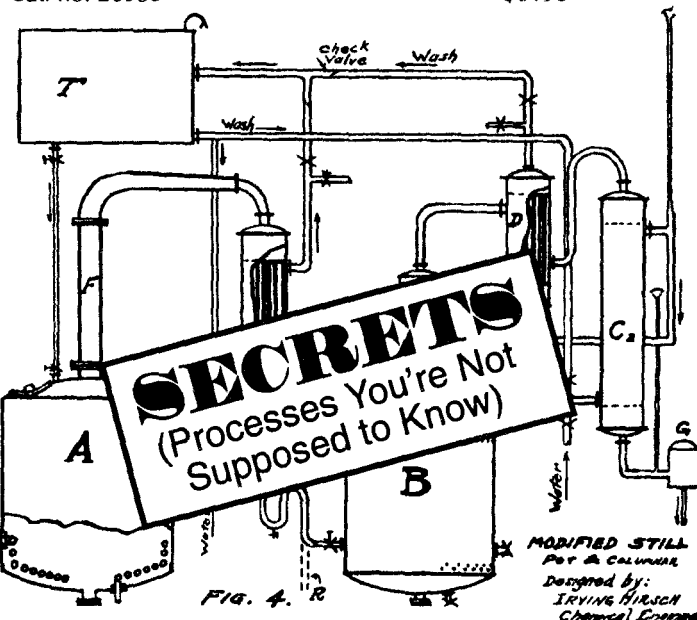
I'll never make my own booze. I'm too lazy, I guess. Nevertheless I found this book interesting because this kind of information that is never published. It's passed on through apprenticeships. The text is typewritten, and the illustrations are industrial. I get the overpowering feeling that this is information that the government and especially the distilling industry wants to keep to itself.

Excellent, rare information. An interesting book on something that people have enjoyed and gotten into trouble with since the beginning of time. Get a copy and enjoy it. But don't get into trouble. Order a copy today!

5 1/2 x 8 1/2 paperback 183 pages

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INCREDIBLE CHEMICAL CROSS REFERENCE!

*Decode Obsolete
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Chemical Names*

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by Lindsay Publications Inc

If you haven't run into the problem yet, you will. You'll be reading some old chemical formula calling for mirbane oil, salt of satum, or liver of sulphur. A quick check of this handy list of chemical terms would tell you that you need nitrobenzene, lead acetate, or potassium sulphide.

What we did was enter into our computer two thousand chemical equivalents gleaned from a variety of chemistry textbooks, industrial references, and formularies in our reference library dating back to the early 1800's. The computer merged and sorted the lists into alphabetical order. The result is a chemical cross reference.

We have kept unusual and probably incorrect spellings. We have made no attempt to verify that the definitions are correct. What we have done is provide you with one master list of the best equivalents we could find. We've already found it useful, and you will too. Get a copy for your reference library. 5 1/2 x 8 1/2 paperback 44 pages

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Make Soda Pop!

Make your own soda! It's easy! And it's great soda!

Build this remarkably simple device using hardware store components, hook it to a bottle of carbon dioxide, and you're ready to make soda. The major expense is the CO2 tank and its regulator. But you'll quickly recover that cost in a single summer.

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It's one of the most useful and popular machines (at least with the kids) I've ever built. A single small tank of CO2 last me about a year, and that's an ocean of soda. Each jug is very inexpensive. Get a copy, and build a soda pop machine! 5 1/2 x 8 1/2 booklet 22 pages

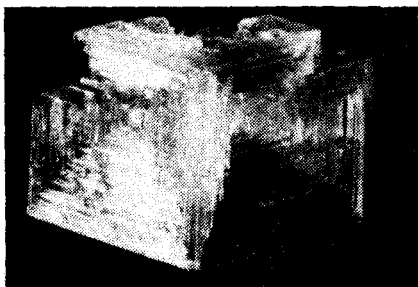
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GROW CRYSTALS!



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by Holden & Morrison

Crystals exist in everything from your TV set to the castings you pour. Learn about what crystals are and how they grow. Learn how to grow your own, easily and inexpensively.

Chapters include: solids and crystals, solutions, solubility diagrams, two methods for growing crystals, building blocks for crystals, twelve recipes, symmetry, arrangements of atoms, cleaving and gliding crystals, melting and transforming, piezoelectric effect, optical experiments and more. You also get sources of supplies, making a spectroscope, suggestions for research, more books and articles.

Excellent book. Easy to read and understand. It was first published in 1960, so you know it's a good book. Get a copy. A great science fair project. 5x8 paperback 318 pages
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DECIDED NOT TO GO TO SATURN AFTER ALL

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TOM GOETZ

New Seden Maine

Edison's Assistant Remembers Menlo Park!

Relive Edison's most inventive & most fascinating years!

MENLO PARK REMINISCENCES VOL 1

by Francis Jehl

Great Book! Not only do you get the inside scoop on the electric light, the phonograph, mimeograph, the telephone (Bell beat Edison to the patent office by one day), but you get the anecdotes that proves how brilliant and bizarre Edison really was. This was

a guy that I would have liked to met, a guy who chewed tobacco, spit on the floor, told vulgar stories and was known for his creativity and sense of humor — a true "character".

From the backcover:

"In this revealing book, a former laboratory assistant to Thomas Alva Edison (1847-1931) recalls life in the great inventor's laboratory and workshops at Menlo Park..."

Eighteen



years old when he first arrived in Menlo Park in 1879, Francis Jehl subsequently witnessed a flood of ingenious inventions...

Offering exceptional coverage of the technical aspects of Edison's work, this profusely illustrated volume will also fascinate the general reader. (The author's account of Edison playing with his newly developed phonograph is delightful!)... Nearly 400 photographs and il-

lustrations depict Edison and his assistants; Menlo Park; Edison's laboratory, inventions and instruments; the restored sites at Henry Ford Museum & Greenfield Village; and more....

Brimming with anecdotes and intimate first-hand observations, Menlo Park Reminiscences provides 'a really lively picture of Edison at work'..."

If you're into the history of technology, or you would really like to "meet" one crazy, talented guy, then you should have this book. Edison would have devoured this catalog had it existed in his day. He was one of us. (Well, maybe he wasn't THAT bizarre...) Fascinating book. Get a copy. 5 1/2 x 8 1/2 paperback 448 pages 113 illustrations 267 photos

Cat. no. 377

\$13.95



BLOW IT UP!

HERCULES DYNAMITE ON THE FARM — DITCH BLASTING

by Hercules Powder Company
reprinted by Lindsay Publications

"... It is true that due respect must be paid to the power stored in a cartridge of dynamite or a cap; but millions of pounds are used annually in this country with comparatively few accidents." Who knows how much is used now?

You'll learn about the selection of explosives and blasting supplies. Learn about Hercules products of 1934 such as Hercotol, Hercules Ditching Dynamite, Extra Low Freezing Dynamite, Hercomites 2 to 7, blasting caps, safety fuses, and blasting machines — you know, the

T-handle device used to detonate the charge. You may want to have a Ohmmeter-Galvanometer, a rheostat, leading wire, cap crimping pliers with fuse cutter, and other equipment.

Chapters include priming methods, lighting fuse, hangfire and misfires, how to handle frozen dynamite, storage of explosives, transportation of explosives, safety, and of course, the last half of the book concerns itself with laying out and blasting ditches.

Make yourself a moat! Keep the neighbors awake at night! If you intend to blast, stay away from me. Interesting reading! 5 1/2 x 8 1/2 paperback 64 pages
Cat. no. 20480

\$4.95

THE CHEMISTRY OF POWDER AND EXPLOSIVES VOL 1

by Tenney L Davis

reprinted by Lindsay Publications

Here you get a textbook written for fourth-year and graduate chemistry students at MIT, and first published in 1941. Tenney explains in his preface, "No effort has been made to describe the use of explosives in ammunition and in blasting beyond the minimum description which is needed to make clear the modes of their behavior, and no account has been included of the chemical-engineering aspects of their manufacture." In other words he won't show you how make explosives or detonate them.

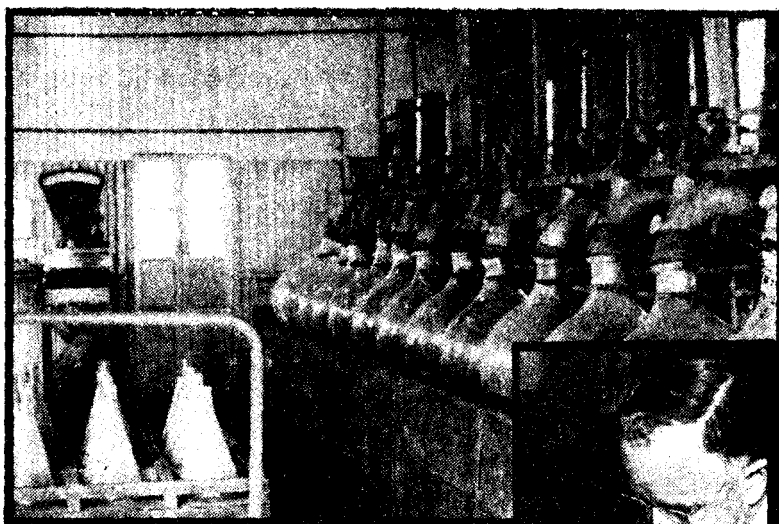
But! This is the definitive text on one of most interesting classes of chemical compounds in common use. The energy that can be quickly and violently released by nitrogen bonds is fascinating even to non-chemists.

You'll learn about the properties of explosives, how they're classified, how an explosion propagates, the velocity of detonation, the Munroe effect, the detonating fuse and more. You get the history and chemistry of black powder and then fireworks including railway fuses, flares, picrate whistles, stars, roman candles, pinwheels, bombshells, toy caps, silver torpedoes, railway torpedoes, sparklers, snakes and much more. Visit a Chinese firecracker factory! Finally, learn about aromatic nitro compounds

such as tri-nitrobenzene, trinitrotoluene (TNT), Ammonium Picrate, Butyl Tetryl, and many others.

Most of these compounds are described in terms of their melting points, who developed them, their uses, and often a rough outline of their manufacture. Even for the non-chemist it's interesting reading.

The classic explosives book! Consider it carefully. Something unusual for your reference library that you won't find on sale at your local newstand! Get a copy! 5



CHEMISTRY OF POWDER & EXPLOSIVES!

1/2 x 8 1/2 sewn pages with paper cover - 232 pages - well illustrated

Cat. no. 20420

\$8.95

CHEMISTRY OF POWDER & EXPLOSIVES VOL 2

Learn about nitric esters such as methyl nitrate, pentryl, nitroglycerin, nitrosucrose, and the secrets of smokeless powder: history, classifications of colloided nitrocellulose powders, the manufacture of single-base powder, stabilizers, transformations during aging, flashless charges,

and more. Learn about dynamite, blasting gelatin, Sprengel explosives, liquid oxygen explosives, perchlorate explosives, military ammonium nitrate compounds and more. Next, it's the nitroamine class of explosives, such as urea nitrate, guanidine nitrate, ethylenedinitramine, and others. Finally, learn about fulminating compounds, detonators, lead and silver azide, nitrogen sulfide, tetracene, friction primers, percussion primers and more.

This second volume was re-

leased two years after the first. Fascinating reading! Put a copy in your library. 5 1/2 x 8 1/2 sewn pages, paper cover - 312 pages Cat. no. 20439 \$9.95



HISTORY OF EL DUPONT DE NEMOURS POWDER COMPANY

by Banker & Investor Magazine
reprinted by Lindsay Publications

The duPonts made their fortune making gunpowder for the U.S. government. Samuel duPont's son, Eleuthere Irenee (E. I. duPont), was out of a job as manager, so he became a student of the great French chemist, Lavoisier, and later took a job at the French Government Works, learning the manufacture of explosives.

Both duPonts came to the U.S. in 1800, and were asked to set up the first high-quality powder factory in the new country. Being the only defense contractor to offer the government powder, the duPonts earned \$50,000, an outrageous fortune, their first year! They were on their way.

This 1912 history of the company

covers the problems of powder and its manufacture, the plants they built, and the history of explosives in general, including mention

of a nitroglycerin factory in Glasgow turning out 50 million pounds of nitro each year!

You get pictures of the ruins of the first powder mill, a letter from Thomas Jefferson, their early salt-peter refinery, men wheeling carts of nitro, the acid plant at Louviers CO, experimental black powder press house, experimental equipment for purification of nitro, and much more.

Making explosives is a great way to get yourself killed. Not only did these people do it for a living, they got rich! This is part history, part technology, and part advertising. Interesting stuff! Get a copy! 5 1/2 x 8 1/2 paperback 224 pages

Cat. no. 20579

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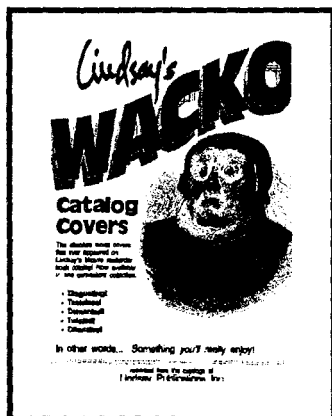
They Got Rich Making Explosives!



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Now! You can get sick once again! Reread the bizarre catalog back covers that have made Lindsay's name a household word in mental institutions throughout the world.



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Have some fun with this! The booklet is actually free. The price reflects handling and shipping more than anything else. We have a bunch on hand, but we don't intend to reprint. So if you want one, you had better get one sometime soon. While they last! And you had better get one before the steam-powered computer craps out....

Just something else to clutter the coffee table or line the garbage can....

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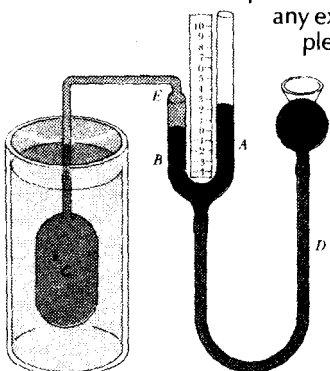
*A Master Reference in
Print since 1947!*

COLLEGE PHYSICS

by Sears, Zemansky & Young

If there was ever a classic college physics text, this is it. It has been around a LONG time (since 1947). I was referring to this text when I was in high school researching adiabatic, isentropic expansion processes for liquid air machines. It was great then, and it's better now.

You get the straight scoop on all aspects of physics which should be of importance to any mechanic and any experimenter. You'll find plenty of math, none of it too heavy, that allows

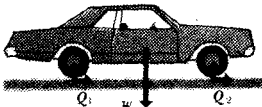


you to predict the performance of everything from weights and springs, rockets, RL electric circuits, engines, pipe organs, electromagnets, light and lenses, spectrometers, and even nuclear physics.

What you get in this book are the laws that govern energy and its use. If you intend to design machines, you should certainly know the simplest things

such as the laws of motion, center of gravity, inertia, and more. If you're into steam engines, do you know the difference between Fahrenheit, Celsius and Rankine systems? What is specific heat? What is an ideal gas? How about sound and wave motion? Building a Tesla coil or Wimshurst machine? You had better study up on electrostatics. What's the definition of an ampere of current? And on and on.

If you try to build anything of any complexity that comes anywhere near modern state-of-the-art, you had better know what's in this volume. If you don't, you'd have a better chance of hitting the moon with a slingshot



This is a 'must have reference' book. Every public library should have a copy. Every designer, builder, researcher, and experimenter should have a copy for reference. It's far too expensive, but then, it IS a college text that is being constantly updated. This is the most recent edition. This is the way the real world works, and I'll bet you don't even know a tenth of what's in here. It doesn't have to be that way. Get yourself a copy, and get learning. It's great! 8x10 hardcover 880 pages
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CONTENTS

vector addition, force, equilibrium, Newton's first law, friction, motion, average velocity, instantaneous velocity, freely falling bodies, relative velocity, Newton's second law, mass, motion in a plane, circular motion, centripetal force, motion of a satellite, work, kinetic energy, gravitational potential energy, power, mass and energy, impulse and momentum, inelastic collisions, recoil, rocket propulsion, moment or torque of a force, center of gravity, couples, angular velocity and acceleration, moment of inertia, torque and angular acceleration, parallel-axis theorem, stress, strain, elastic modulus, harmonic motion, simple pendulum, physical pendulum, pressure in a fluid, pressure gauges, pumps, surface tension, contact angle and capillary, Bernoulli's equation, viscosity, Stokes' law, Reynolds number, thermometers, thermal expansion and stresses, heat transfer, quantity of heat, heat capacity, change of phase, conduction, convection, radiation, Stefan-Boltzmann law, ideal gas, phase diagrams, triple point and critical point, vapor pressure, the cloud chamber, energy and work in thermodynamics, adiabatic process, isochoric process, internal energy of an ideal gas, heat engines, internal-combustion engines, steam engines, the refrigerator, the Carnot cycle, absolute zero, energy conversion, molecular theory of matter, Avogadro's number, molar heat capacity of a gas, crystals, periodic waves, speed of a transverse wave, water waves, sound waves, Doppler effect, electric charges, Coulomb's law, Gauss's law, electric potential energy, Millikan oil-drop experiment, cathode-ray oscilloscope, capacitors, effect of a dielectric, current, resistance, electric field of the earth, Kirchhoff's rules, ammeters and voltmeters, magnetism, Thomson's measurement of e/m , the Hall effect, direct-current motor, electromagnetic pump, magnetic field of a circular loop, motional electromotive force, Lenz's law, Faraday's law, RL circuits, magnetic permeability, ferromagnetism, hysteresis, alternating current circuits, series resonance, nature of light, Huygens principle, reflection at a plane surface, graphical methods, refraction at a spherical surface, thin lenses, lens aberrations, the camera, the projector, the compound microscope, colorimetry, interference and diffraction, holography, polarization, theory of relativity, photons, electrons, the laser, X-ray production and scattering, the Bohr atom, electron spin, semiconductors, radioactivity, nuclear reactions, particle accelerators, and much, much more

PROCEDURES IN EXPERIMENTAL PHYSICS

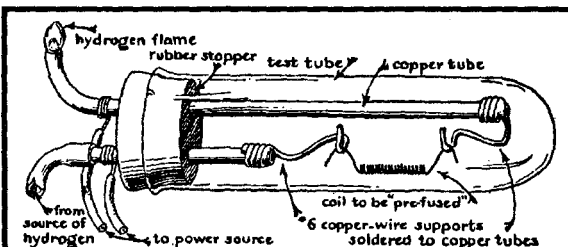


Fig. 9. Arrangement for pre-fusion of metal to tungsten coil.

PROCEDURES IN EXPERIMENTAL PHYSICS

by John Stong

reprinted by
Lindsay Publications

If you consider yourself an experimenter, an inventor, or a builder of unusual machines and equipment, you must have a copy of this fantastic classic text. No two ways about it.

You'll find wall-to-wall practical how-to and incredible illustrations on almost every one of the more than 600 pages. Chapters include: laboratory glass blowing, laboratory optical work, technique of high vacuum, coating of surfaces by evaporation and sputtering, the use of fused silica, electrometers and electroscopes, geiger counters, vacuum thermopiles and the measurement of radiant energy, optics, photoelectric cells and amplifiers, photography in the lab, heat and high temperature, notes on the materials of research, notes on the construction and design of instruments and apparatus, and molding and casting.

This is some incredible stuff! Learn how to blow glass and make aspirators, distillation condensers, and so on. Learn how to seal copper to glass so that you can imbed electrodes. Learn how to rough cut lens blanks from large plates of glass and then grind them into lenses on your homebuilt lens grinder. Learn how to make a parabolic telescope mirror using the standard techniques. Learn to make unusual equipment to test the finished mirror. Learn how to grind a Schmidt lens.

Build high vacuum roughing pumps, getters for creating the highest vacuums, and diffusion pumps using mercury and oil. See charcoal traps, kinetic vacuum systems, vacuum gauges of all types. Remember, all this comes with construction details.

Learn how to silver mirrors with a variety of methods including vacuum sputtering. You'll find extensive details on the evaporation technique for aluminum.

Fused quartz is valuable because unlike glass it can

Wall-to-Wall How-to! Classic Text! Incredible Illustrations!

withstand extreme temperature changes without shattering. Learn how to build micromanipulators and all the rest of the equipment to produce tiny fibers that can be used for suspending the elements of an electrometer, for cross hairs in optical instruments, or for building a balance. The microbalance shown is supposed to be sensitive down to a billionth of a gram per division!

And there's so much more! Build a Compton adjustable quadrant electrometer, a Hoffman electrometer, and others useful for x-ray and cosmic ray work. Build a Geiger counter. You can build your own Geiger-Mueller tube if you master the high-vacuum technique taught earlier. Unfortunately, most of the electronics described is based on vacuum tubes of fifty years ago rather than on transistors.

Build vacuum thermopiles that measure infrared, visible light and ultra-violet so accurately that they can be used to calibrate photographic lightmeters and such. You've heard of carbon arc lights, but do you know how to build iron arc lights? Or low pressure mercury arc lights? And others? You can even build a machine to measure the wavelength of colored light.

You'll find details on hydrogen furnaces, crucibles, burners, electric arc furnaces, and even a lab setup for making artificial rubies and sapphires! And there's much more - even down to what we consider the "easy stuff" like using a lathe and sand casting.

This is a fantastic book loaded with construction secrets for unusual equipment that you should have. First published in 1938, this

baby went through a couple of dozen printings! It's a classic. It's incredible. You should have a copy for reference if nothing else. Highly recommended. Order a copy today.

5 1/2 x 8 1/2 sewn paperback 642 pages
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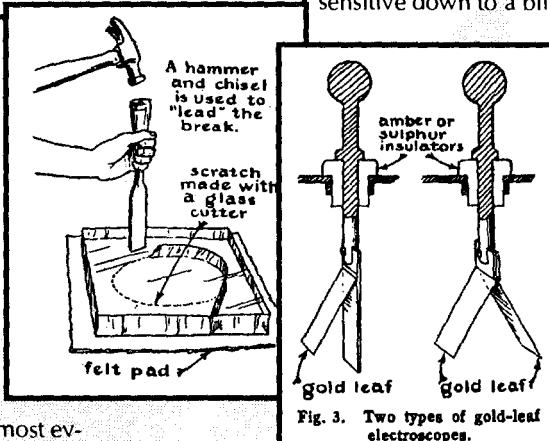


Fig. 3. Two types of gold-leaf electroscopes.

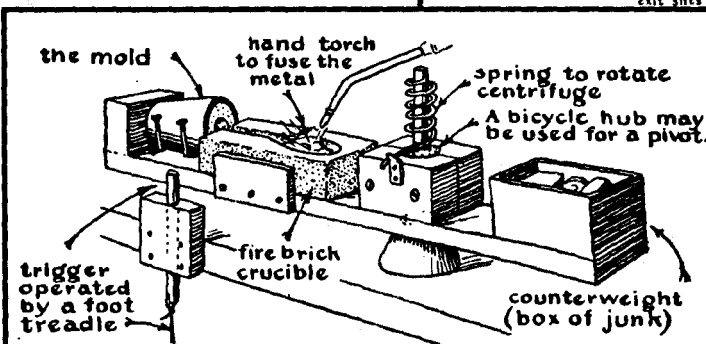
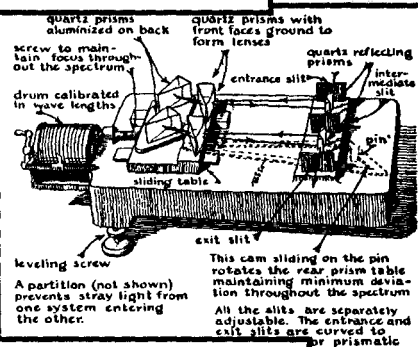
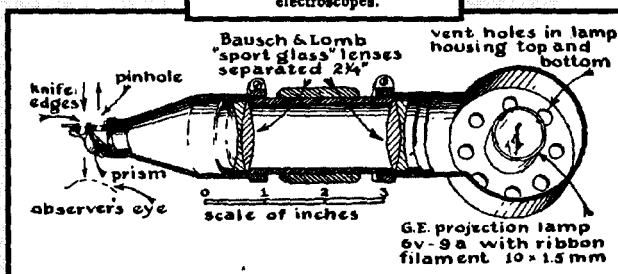
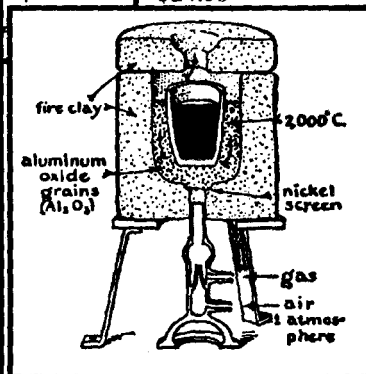
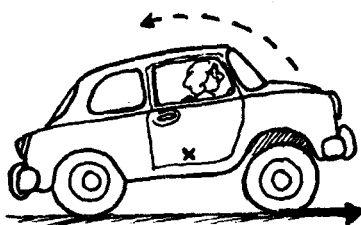


Fig. 9. Lost-wax casting. Centrifuge method for filling the mold.





THINKING PHYSICS

Practical Lessons in Critical Thinking

by Lewis Carroll Epstein

I think most people are ostriches. They bury their heads in the sand rather than explore and marvel at some of the simplest things around us. They think I'm a wacko because I'm curious. You're reading a catalog that is a result of curiosity. If you're reading this, then you're obviously a wacko like me. And this book is for the curious like us.

You get a collection of puzzles that make you think, teach you lessons, and point out curious things you've haven't gotten to yet.

"A dragster starts from rest and accelerates to 60 mph in 10 seconds. How far does it travel during those 10 seconds?" Next page: "The next dragster is so

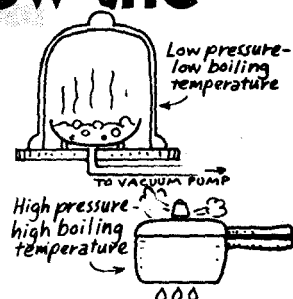
stripped down that it does not even have a speedometer. At maximum acceleration from rest it goes 1/10 of a mile in 10 seconds. What speed did it get up to in those ten seconds?" Page 48: "If a can of compressed air is punctured and the escaping air blows to the right, the can will move to the left in a rocket-like fashion. Now consider a vacuum that is punctured. The air blows in the left as it enters the can. After the vacuum is filled the can will a) be moving to the left b) be moving to the right c) not be moving."

Page 147: "By glancing at the night sky you can immediately estimate your a) latitude b) longitude c) both d) neither" Page 244: "A block of metal with a white surface and block of metal with a black surface of the same size are each heated to 500°C. Which radiate the most energy?"

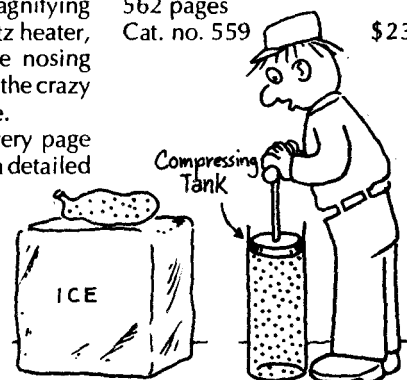
Page 425: "Is it possible to make a magnetic field without the use of iron?"

You'll find puzzles on kinematics, momentum, rotation, gravity, fluids, heat, vibrations, gravity, light, electricity & magnetism, relativity, and quanta. And within these topics you'll find fascinating details about an artificial aurora, synchrotron radiation, time warp, a magnifying glass in the sink, a quartz heater, the quicksilver sea, the nosing car, a popcorn neutrino, the crazy pulley, and much more.

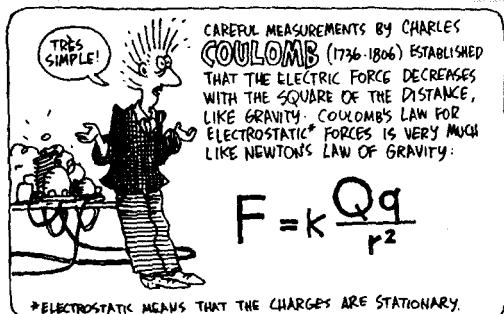
At the bottom of every page printed upside down is a detailed explanation of the answer. And every puzzle is illustrated. This is a fun way to learn about the world around you. And I don't care if you have had a number of



courses in physics, this will make you think. It's a fun, educational book. Guaranteed to teach you valuable lessons. Expensive, but worth it. Get one! 6x9 paperback 562 pages Cat. no. 559 \$23.95



Cartoon Guide to Physics!



THE CARTOON GUIDE TO PHYSICS

by Gonick & Huffman

Learn the basics of physics (the science of energy) with this cartoon guide. It can't get any more painless or any more fun than this. It only covers mechanics and electricity & magnetism, but those are probably the two fields you'll most often encounter every day.

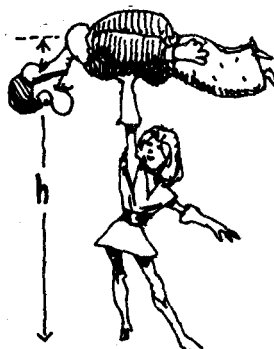
Learn about satellite motion, orbits, Newton's third law, collisions, rotations, capacitors, electric field, Faraday induction, inductors, AC and DC, Maxwell's equations and more.

be a fantastically complex field. But that's what makes it interesting - you'll never know it all. Get a copy of this and learn. It will whet your appetite for more. 7 1/2 x 9 paperback 212 pages Cat. no. 586 \$11.00

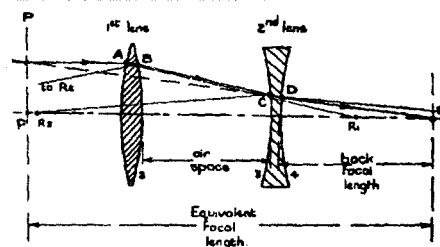


If you build machines, they're powered by energy. If you are to enjoy building machines and do your best and avoid mistakes, you should know the basics of physics. Want to build a perpetual motion machine? You had better study physics. It could save you a lot of time, money, and grief.

This is a great but brief introduction into what can



OPTICS!



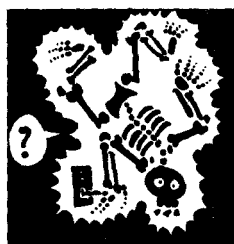
OPTICS & OPTICAL INSTRUMENTS

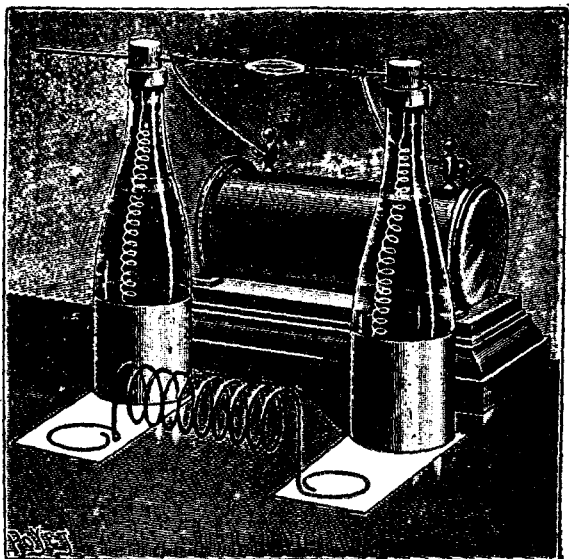
by B.K. Johnson

Here's a reprint of a 1947 book that reveals in simple formulas how to design or at least understand microscopes, telescopes, collimators, simple and complex lenses, photographic lenses, mirrors and more.

Chapters include: reflection and refraction, focal length measurements, the eye, the telescope, the microscope, photographic lenses, optical projection systems, working and testing optical glass, plus an appendix describing how to silver mirrors, cement lenses, and more.

You won't need this material everyday. But if you need basic info on lenses without all the complex theory, get a copy of this. Quite reasonably priced. 5 1/2 x 8 1/2 paperback 224 pages Cat. no. 551 \$5.95





George M. Hopkins's Experimental Science

EXPERIMENTAL SCIENCE
by George M. Hopkins
reprinted by
Lindsay Publications

Fantastic! There is no other way to describe this incredibly illustrated two-volume set from 1906. It is certainly worth having.

Starting about 1889 Scientific American Magazine published a regular column by George Hopkins showing readers how they could build experimental equipment and test their own versions of new inventions such as the electric light, telephone, and phonograph. Hopkins' columns were routinely reprinted in books, and this 25th edition from 1906 had to be split into two volumes. And what a pair of volumes they are!

Build a gyroscope, Foucault's pendulum, a simple hydraulic press, a hydraulic ram, simple air pump, Geissler tube, a recorder for sound vibrations, device for production of sounding waves, a simple phonograph, centrifugal siren, and Norremberg Doubler.

You can build a simple microscope and accessories, or a simple camera with plate holder, make Daguerreotype photos like those from the 1840's (dangerous), experiment with magnets, static electricity, build all kinds of batteries, a device that converts heat directly into electricity, build bells, electromagnets, and even a 1/4 hp electric motor.

In volume Two you will explore AC electricity, arc lamps, high voltage induction coils, and much more. You will build a telephone and a magic lantern. You'll blow glass, grind lenses, make test tube racks, build and fire a crucible furnace, make carbon rods and plates, and much more. Build a simple acetylene gas generator. Experiment with liquid air, diving rods, metal detectors, wireless telegraphy, and high voltage!

Build Amazing Scientific Equipment! A 1906 Classic back in print!

You're expected to have some mechanical ability. The how-to you get is not overly detailed, but you WILL get excellent illustrations that will show you almost everything you need to know. Any additional secrets are pointed out in the text.

Build and operate scientific equipment that hasn't even been seen in decades. Unique science fair projects! You will get hours and hours of enjoyable reading. It's impossible to reveal the scope and beauty of these two books in this limited space, but take my word for it, these are fascinating books. Top quality. Expensive, but worth the price. Put them on your "must have" list...

• **EXPERIMENTAL SCIENCE**
Volume One

5 1/2 x 8 1/2 paperback 560 pages
Cat. no. 4490 \$19.95

• **EXPERIMENTAL SCIENCE**
Volume Two

5 1/2 x 8 1/2 paperback 532 pages
Cat. no. 4503 \$19.95

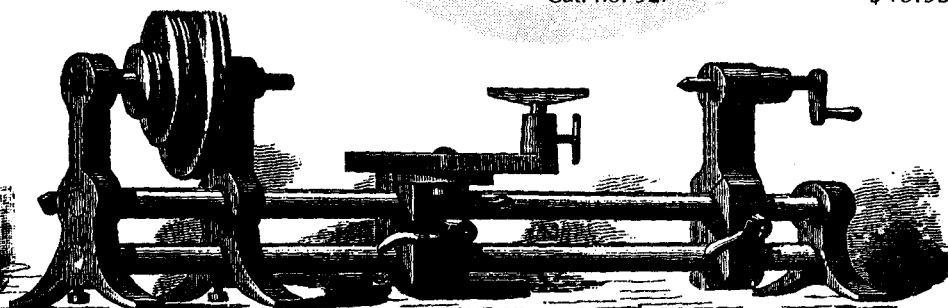
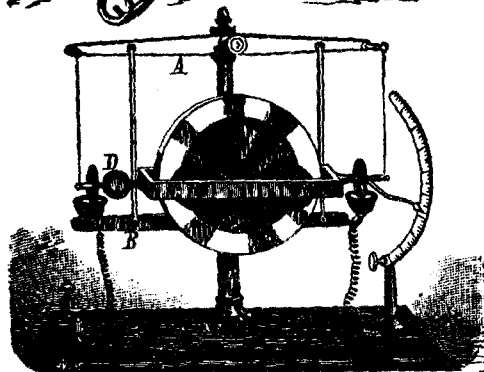
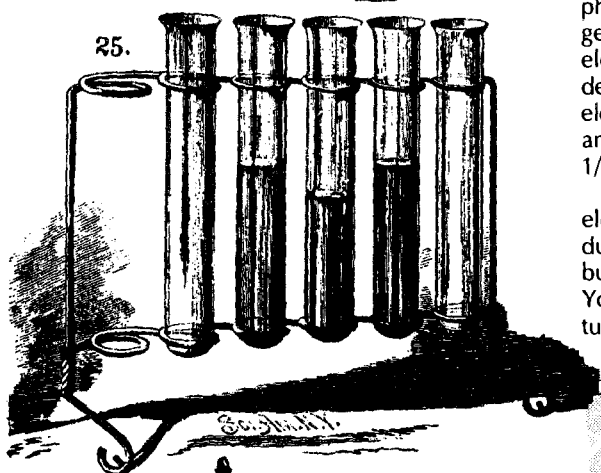
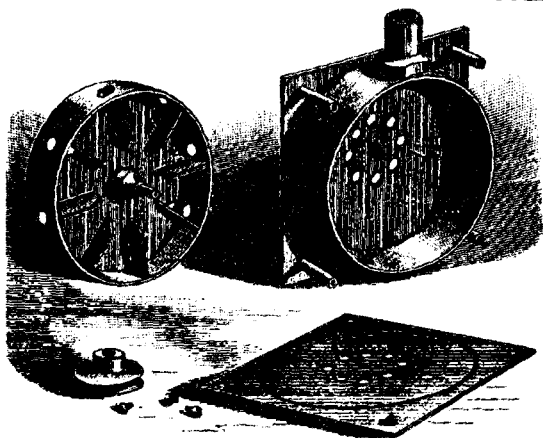
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NOT AVAILABLE



SCIENCE!

FAIRS & PROJECTS

SCIENCE FAIR

Developing a Successful and Fun Project

by Maxine Iritz

If you're like every other bozo, you'll wait until the last second to develop that required project for science class. And if you're like every other bozo on earth, you won't have any clever ideas, and you'll hate building it.

BUT IT DOESN'T HAVE TO BE THAT WAY!

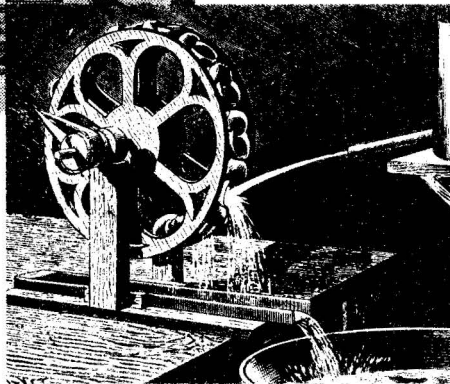
Get this book and start a science project now. A project can be loads of fun! Yes, even I have had science fair projects like a four month set of experiments with new antibiotics, or the 400 pound computer built out of old telephone equipment that took seven months to complete.

You can have fun, and get an A, too! You'll learn about choosing a topic, getting organized, writing the background research paper, the question and hypothesis, the experiment, results and conclusions, best foot forward, and the fair!

You get all kinds of ideas for projects that students have successfully completed and exhibited. You'll see how they got their ideas, planned and documented their experiments, and displayed their projects. This is not as great a science fair book as I would like to see, but in view of just how few there are, I'd say it's worth reading if you're planning to complete a project. Consider it carefully. 8 1/2 x 11 paperback 88 pages

Cat. no. 755

\$9.95



SECRETS OF 123 CLASSIC SCIENCE TRICKS & EXPERIMENTS

by Edi Lanners

Lanners has collected parlor tricks and experiments along with beautiful wood cut illustrations from the 1800's.

"These captivating projects will appeal to the curiosity of every child, arouse his or her interest in science; and almost effortlessly get across some of the basic principles of physics, chemistry, physiology, and electricity. It's a gold mine of ideas for school and science fair projects, and a treasure trove of easy-to-perform 'magic tricks' that are ideal for party entertainment...."

Try your hand at the induction top, a leyden jar & electrical tea tray, crystals on a thread, the camphor boat, floating iron, how to fill a sealed wineglass, a simple prism, sundials, glass globe into microscope, the fade-over effect, the Giant Hare, shadow pictures, the coin in the bottle, the disappearing coin, and many, many

more.

Some of these are fascinating, some crazy, and some are guaranteed to get you thrown out of your favorite saloon! Interesting book of old time projects. Consider it. 5 1/2 x 8 1/2 paperback 192 pages

Cat. no. 568

\$7.95

THE COMPLETE BOOKS OF CHARLES FORT

by Charles Fort

Strange! Very strange! A must book for anyone who researches unexplained phenomena. The dust jacket explains the book better than I can...

"Did beings from outer space visit earth in the past... are the various objects seen in the sky (flying saucers, in modern terminology) evidences of their visits?"

"What is the explanation of falls of frogs, falls of fishes, falls of seashells, which have been recorded from time to time? Are they explainable in terms of selective tornadoes, or are they evidences of a planetary mechanism that we do not know?"

"How can we answer reports of strange animals, disappearances of men from open sight, curious structures in the snow, talents like teleporation and telekinesis?"

"These are the 'damned,' by which the late Charles Fort meant all the wide range of mysteries that are ignored by orthodox science or explained away improperly."

"Charles Fort worked full time for twenty-seven years at the British Museum and the New York Public Library researching scientific journals, old periodicals, newspapers, and manuscript accounts to gather material on phenomena from the borderlands between science and fantasy. His researches appeared in four books, The Book of the Damned [1919], New Lands [1923], Lo! [1931], and Wild Talents [1932]."

The Strange Books of Charles Fort

**Four
Mysterious
Books in One!**

"In these four volumes Fort gathered together, organized and commented on a wild host of phenomena: flying saucers seen in the sky before the invention of aircraft, flying wheels, strange noises in the sky; correlations between volcanic activity and atmospheric phenomena; falls of red snow; falls of frogs, fishes, worms, shells, jellies; finding of 'thunderbolts'; discrepancies in the schedules of comets, sightings on Mars and the moon; infra-Mercurian planets; inexplicable footprints in snowfields; flat earth phenomena, disruptions of gravity; poltergeist phenomena; stigmata; surviving fossil animals; the Jersey devil; Kaspar Hauser; spontaneous combustion...."

"Charles Fort himself never really explained his phenomena... yet through the years his following has grown...."

In this three-inch-thick hardcover book you'll find more details on more strange, unexplained events than you'll find anywhere else. It's an incredible collection that should be part of any library on fringe science. If you specialize in the gray area at the outer edge of science, you must have a copy of this. Recommended.

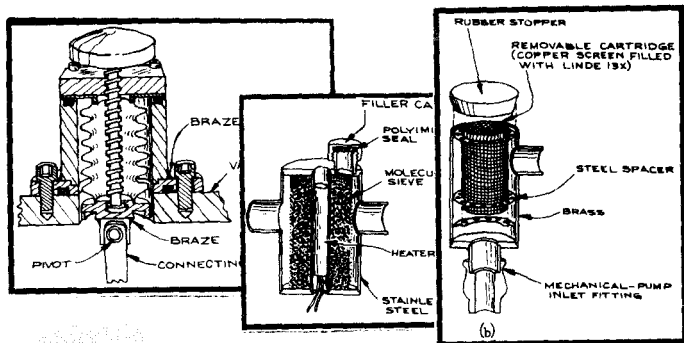
No illustrations, but there is a complete and detailed index.

5 1/2 x 8 1/2 hardcover 1126 pages

Cat. no. 750

\$29.95





BUILD SCIENTIFIC APPARATUS

New 2nd Edition!

BUILDING SCIENTIFIC APPARATUS

A Practical Guide to Design and Construction

by Moore, Davis, Coplan & Greer

The ultimate equipment book is *Procedures in Experimental Physics* offered elsewhere in this catalog. This book is the modern equivalent. I don't think this volume in any way surpasses *Procedures* but it is the closest thing I've seen yet. And it's about equipment built with modern materials.

Chapters include: mechanical design, working with glass, vacuum techniques, optics, charged-particle optics, electronics, measurement and control of temperature. You also get references and a list of manufacturers and suppliers.

You'll learn about metals, alloys and their use in fabrication. You'll learn about bearings, working glass tubing, grinding and drilling glass, vacuum gauges, mechanical vacuum pumps, cryopumps, vacuum system design, cleaning optical components, features of laser design, spectrometers, Fabry-Perot interferometers, photovoltaic detectors, electron gun design, fringing-field correction, charged-particle detection, designing and building electronic equipment and much more.

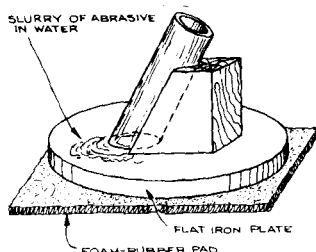
You get great drawings, charts, diagrams, equations, and more. This is modern hi-tech stuff. IC's and transistors are fabricated from semiconductors, but semiconductors also produce light. You've heard of silicon, probably germanium and gallium arsenide. But how about cadmium telluride? It's available from

Kodak under the name Irtan 6, and transmits out to 31 μ m! What do you need that for? I don't know. But neither will you unless you know this stuff is available. Then your imagination can dream up ingenious new uses.

You could be the first in your neighborhood to build a duoplasmatron ion source or a Mach-Zehnder interferometer. You could even put a bellows-sealed, wobble-drive, rotary-motion feedthrough on the mantle. Now wouldn't that raise the eyebrows of the roach exterminator next time he sprays your living room?

Knowledge of the contents of this book will push you beyond the level of the average machinist/handyman. And whether or not you use much of this material is not that important. The more you know, the more creative you can be because you have the raw material to synthesize new ideas. A smart mechanic will use this as an idea book if nothing else.

If you like to build unusual equipment, this belongs on your shelf next to *Procedures in Experimental Science*. Get a copy! 8 1/2 x 9 paperback 549 pages Cat. no. 532 \$39.95



GAS INTO LIQUID!

LIQUID AIR

by T. O'Connor Sloane

reprinted by Lindsay Publications Inc

This fascinating 1899 book is about the unusual machines that take the invisible air around us, cool it, and turn it into a liquid.

You'll discover interesting historical details about early thermometers, how they were built, and how they worked. You'll review the lives, work, and methods of early investigators including Faraday, Natterer, Colladon, Pictet, Cailletet, Olszewski, Dear, Tripler, and of course, Linde. Explore the Joule-Thomson effect, and examine Hampson's apparatus. You'll try your hand at liquid air experiments, and in the last chapter see what 1899 experimenters thought the applications of liquid air should be.

This is not really a how-to cookbook for machines. It is a 17 chapter exploration of early investigators' ideas and their methods. An avid experimenter will find a wealth of detailed data to digest. The important machines and details about them are here in text and diagrams. You will find more enjoyable and useful information on liquid air in this single book than anywhere else that I know of. It might just provide the missing link you need to begin experimenting with very low temperatures.

An unusual book on an unusual topic. High quality. Fascinating topic. Definitely worth having. Get a copy for your reference library. You'll like it. 5 1/2 x 8 1/2 paperback 365 pages Cat. no. 20021 \$11.95

TEMPERATURES - VERY LOW & VERY HIGH

TEMPERATURES VERY LOW AND VERY HIGH

by Mark W. Zemansky

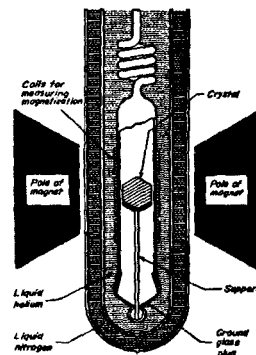
For years now my favorite college physics text has been the one by Sears & Zemansky. I discovered it in high school when I wanted to build a gas liquification machine. Now I discover Doc Zemansky has done a whole book on the concept of temperature. Neat!

"This concise study of temperature and its extremes is designed to provide physics students, laymen and the general reader a greater understanding into the total meaning of 'temperature' as a concept....

How are extremes of temperature measured? How are such extremes of temperature produced? What is the international temperature scale? Also covered: isothermic and adiabatic processes, The Third Law of Thermodynamics, Fusion reactions, Planck's Radiation Law, Energy and entropy, Thermodynamics and negative temperature.

The initial chapters of this volume deal with temperature as it exists in macroscopic physics. The story behind the production and measurement of temperature near absolute zero (-450.67 F) is discussed in the succeeding chapters followed by a review of the production and measurement in the fifty million degree range. And finally, the last chapter goes beyond infinity into the realm of negative temperatures."

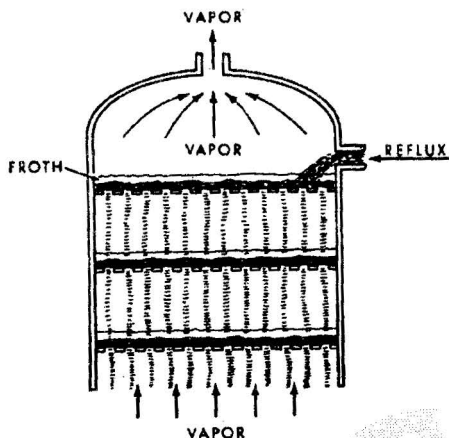
Think about it! Build yourself a 50,000 degree plasma torch! What couldn't you cut up with that? Learn how very low and very high temperatures are achieved. As for negative temperature, I haven't gotten to that chapter yet. Inexpensive good reading. Unusual. By someone who knows. 5 1/2 x 8 1/2 paperback 144 pages Cat. no. 590 \$4.50



DISTILLATION Principles and Design Procedures by R J Hengstebeck

Sure! You can take a tea kettle, attach a copper worm and be distilling moonshine in an hour or so. And you can go blind quicker than that! But what if you want to produce 300 gallons of fuel alcohol for your automobile? That's another story.

Here's a full tilt in-



Industrial Distillation Handbook

ustrial handbook on distillation, a process that is used to make booze, refine oil, and manufacture all types of valuable chemicals.

Chapters include volatilities and equilibrium relationships, distillation operations, column internals, equilibrium flash vaporizations, design of distillation columns, stage and reflux requirements in continuous distillations and batch distillations, efficiencies of column internals, sizing columns, control of distillation operations, other design considerations, estimation of equilibrium data, estimation of enthalpy in design work, and more.

If you're seriously considering building a still, this is a book that will deliver more information than you'll need. You get charts, diagrams, graphs, tables, equations, photos and a lot more. This isn't a moonshine book. This is how the big boys do it.

Expensive, but a great reference. Consider it. Originally published in 1961, I'm surprised that it is still being reprinted. But who knows for how much longer? Get a copy. 6x9 hardcover 365 pages
Cat. no. 216 \$34.50

TECHNOLOGY OF CARBON & GRAPHITE FIBER COMPOSITES by John Delmonte

Planning to build a stealth automobile that can rocket 120 miles an hour down the interstate and yet not register on Smokie's radar? If so, you'll need composites, and this book will take you into this hot technology.

What are composites? Fiber-glass is one. Here you have glass embedded in a resin matrix. Replace the glass with carbon or graphite fibers and you end up with an incredibly strong, lightweight plastic material that is used as fan blades in jet engines, as heavy duty truck springs, or even as pressure vessels to hold oxygen, nitrogen, and helium on the space shuttle.

Chapters include: origins of carbon and graphite fibers, preparation and properties of carbon and graphite fibers, synthetic

resin matrices for service to 200°C, matrices for use up to 300°C, thermoplastic matrices, surface treatments and their effect on composites, mechanical and physical properties, electrical properties and applications, environmental influences, test methods for advanced composites, composites in aircraft and automotive applications, industrial and commercial applications, high temperature resistant matrices, and manufacturing and processing techniques.

This is a great introductory industrial text. You get charts, tables, chemical structures, test data and loads of detail you'll never get from some men's magazine article. Obviously, this is not going to reveal top secret methods used by the military to build stealth fighters, but you'll come away from this book with

They Wanted to Turn Lead into Gold!

ALCHEMY

by E.J. Holmyard

For centuries people tried to turn lead into gold. Today we laugh at them. But is this any different than searching for perpetual motion? What ever your viewpoint, alchemy is an interesting topic.

"Alchemy is thought to have originated over 2000 years ago in Hellenic Egypt the result of three converging streams: Greek philosophy, Egyptian technology and the mysticism of Middle Eastern religions. Its heyday was from about 800 A.D. to the middle of the seventeenth century, and its practitioners ranged from kings, popes, and emperors to minor clergy, parish clerks, smiths, dyers, and tinkers. Even such accomplished men as Roger Bacon, Thomas Aquinas, Sir Thomas Browne and Isaac Newton took an interest in alchemical matters.

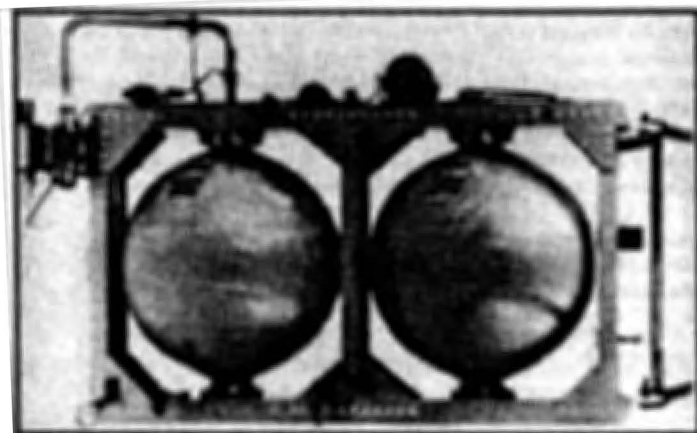
In its search for the 'Philosopher's Stone' that would transmute base metals into silver and gold, alchemy took on many philosophical, religious and mystical overtones. These and many other facets of alchemy are explored with enormous insight and erudition in this classic work. E.J. Holmyard, a noted scholar in the field, begins with the alchemists of ancient Greece and China and goes on to discuss alchemical apparatus, Islamic and early Western alchemy; signs, symbols, and secret terms; Paracelsus; English, Scottish and French alchemists; Helvetius, Price, and Semler, and much more."

Perhaps it IS possible to transmute base metals. Does this book reveal the secret process? I doubt it. But it's fun to imagine anyway. Unusual topic. Consider a copy. 5 1/2 x 8 1/2 paperback 320 pages 46 illustrations

Cat. no. 591

\$8.95

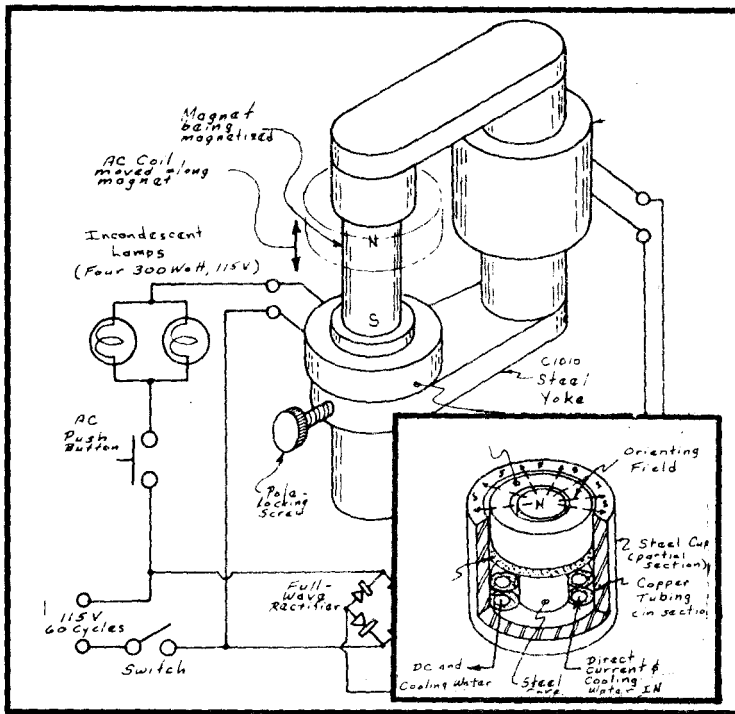
Technology of Carbon & Graphite FIBER COMPOSITES



in-depth knowledge of composites.

Expensive, but this book delivers the secrets of a high-tech material science. Tune it, and

find out what's happening. Maybe you can find a way to fabricate your own! Get a copy! 6x9 hardcover 452 pages
Cat. no. 1143 \$46.50



PERMANENT MAGNET Design & Application Handbook!

PERMANENT MAGNET DESIGN & APPLICATION HANDBOOK

by Lester Moskowitz

Back in print! For now at least... The best magnet book I've seen.

Opening this book gives you the feeling you've opened the lab notebook of a famous magnet scientist. It's loaded with drawings, diagrams, equations, notes, hints, tips, circuit diagrams and more.

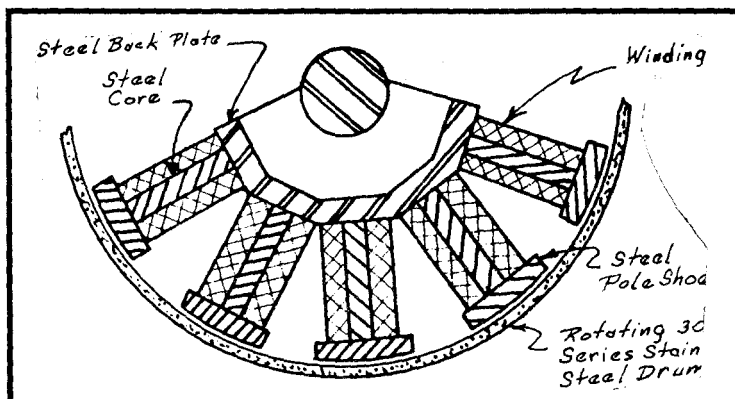
Chapters include brief history of magnets, terms and definitions, classification of magnets and materials, basic manufacturing processes, fundamentals of magnetism, general design considerations, leakage and fringing, circuit effects, exact design methods, and on and on.

You get all kinds of information and making, testing and using magnets from a circuit diagram for a 100 joule impulse magnetizer to suggestions for use in magnetic drives, motors and magnetos, magnetic welding benches and much more.

Expensive! But the best book of its type I've ever seen. Just the right mix of theory and practical application. Rare information. If you think you'll ever need it, get it now. It went out of print once, and is being reprinted (probably only for a short time) by another small publisher. I'm glad to see it's back. 9x12 hardcover 443 pages heavily illustrated

Cat. no. 1149

\$65.00

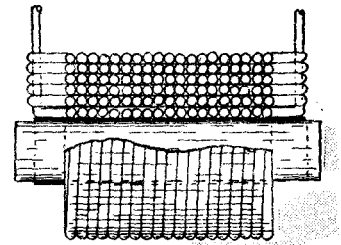


SOLENOIDS, ELECTROMAGNETS AND ELECTROMAGNETIC WINDINGS

by Charles R. Underhill

reprinted by Lindsay Publications

Creating an electromagnet is quite easy as Faraday discovered, and as you and I know. But creating an electromagnet that generates a field of needed intensity, drawing minimal amperage at available voltage without overheating is not so easy. Few



Solenoids, Electromagnets & Electromagnetic Windings

people know how it's done. Here you'll learn the secrets of creating working electromagnets.

Chapters include: magnetism and permanent magnets, electric circuits, electromagnetic calculations, the solenoid, practical solenoids, iron-clad solenoid, plunger electromagnets, electromagnets with external armatures, electromagnetic phenomena, alternating currents, AC electromagnets, quick-acting electromagnets and methods of reducing sparking, materials and bobbins, insulation of coils, magnet wire, insulated wire, windings, forms of windings, heating of windings, and tables and charts. There are also 233 illustrations listed showing everything from a practical multiple-coil winding to rim solenoids telescoped to form disk solenoids.

Underhill was a consulting electrical engineer who put this book out in 1910 and created this 2nd edition in 1914. This is reprinted from one of the fourth thousand printed in 1921.

You get a practical book. The math you get is completely practical and useful. The charts are practical. All of the information is practical.

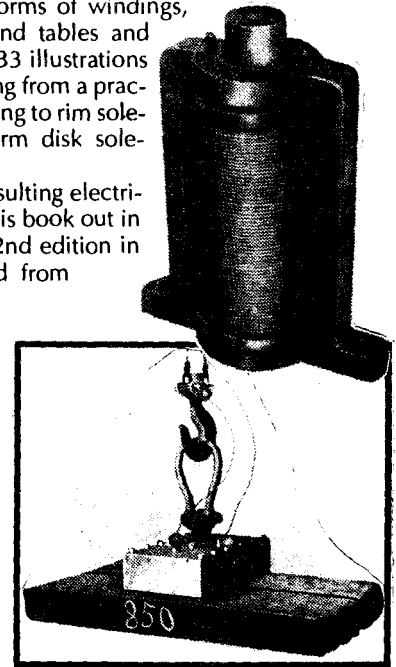
Some things have changed since 1921 such as better insulation and higher-permeability iron, but amps are still and amps and Oersteds are still Oersteds.

Why not build a powerful electromagnet and put it in the bushes outside your house? Pulse the juice to it, and you can roll cars over on their side as they drive by! Imagine the effect it would have on that steel plate your mother-in-law had to have installed in her head after you attacked her with the ax handle! Imagine the fun!

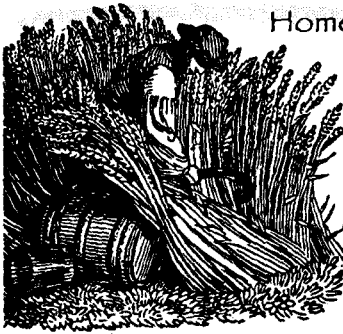
Or build that perpetual motion machine that some people claim is possible. Or how about a flying saucer? Or how about just getting a copy for your reference library? When the need arises, you'll have rare information immediately available. Excellent book. Get one! 4/12 x 8 paperback 342 pages

Cat. no. 20960

\$13.95



Homesteading, Survival, Alternate Energy, and more....



Brew Really Great Beer!

**THE COMPLETE HANDBOOK
OF HOME BREWING**
by Dave Miller

I continually look for good books that will show me how to brew really good beer, like the old world stuff, rather than the cidery homebrew that most people turn out. I'm a beer snob, and only the best will do for me. Happily, the author is a beer snob, too. And the techniques and advice he gives in this brand new book are the best I've ever seen.

For instance, one typical recipe for an American all-grain Pilsener contains such specifications as 10 qt mash water at 136°F, mash pH 5.3 adjusted with gypsum, a 30 minute protein rest at 131°F, with a 2 hour starch conversion at 150° - 141°F, and wort pH of 5.3-5.5 at pitching time. And that's only part of the recipe!

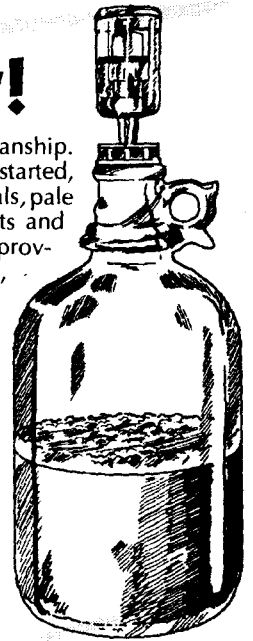
Complicated? Not after you understand what's going on. You can be absolutely certain that the brew you turn out will NOT be in the same league as the malt syrup and table sugar rot gut that you have

been making. In other words, this is craftsmanship.

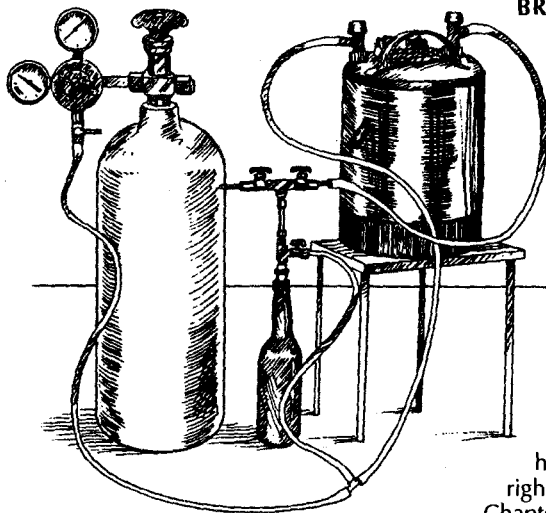
Chapters include the brewer's art, getting started, equipment, cleaning, introduction to materials, pale malts, special malts, malt extracts, adjuncts and sugars, water, hops, yeast, brewing aids, improving your extract beers, small-scale mashing, brewing all-grain beers, crushing the malt, the mash-in, acid rest and and protein rest, starch conversion, sparging, boiling the wort, cooling and assessing, fermentations, bottling, and on and on.

There is more hard-to-find detailed information here than you'll find in a dozen run-of-the-mill brewing books. Top rate. The best I've seen. If you're into brewing, or think you might want to try one day, this is definitely worth having. Excellent. Order a copy. 6x9 paperback 248 pages
Cat. no. 6026

\$11.95



The World's Finest Brews



**BREWING THE WORLD'S
GREAT BEERS**

A Step-by-Step Guide
by Dave Miller

If you drink light beer out of a can because you think beer has to taste like aluminum, this book is certainly not for you. This is a follow up to Miller's first book on brewing. It will get you started brewing great beer. This book will show you how to come extremely close to duplicating the world's finest beers. You'll learn how it's done step-by-step right here.

Chapters include getting started, steps to better brewing with malt extract, first steps in grain brewing, the last step: all grain brewing, going semi-pro, glossary, bibliography, and sources.

This is full tilt. No simplification. You can brew a quality pale ale, a pilsner, or you can jury-rig an old refrigerator and get into lagering. You'll learn all the details of yeast, malt and measurements in degrees Lovibond, sugars, hops and their AAU's, all the equipment and techniques. If you really get into this, you'll learn the intricate technique of maintaining pure yeast cultures just as the labs in the biggest breweries do and lots more.

You can make great ale, stout, porter, German ales, weizenbier, Munich dunkel, helles bock, and much more. You'll probably want to make some of your own brewery equipment. Your wife just might use the rolling pin on you when she finds you've turned the basement into a giant chemistry set, and when she finds that you and your friends are rarely sober anymore. But doesn't sound like fun?

Now you won't have to buy an \$800 plane ticket to suck Adnan's ale in a London pub, or draft Hacker-Pschorr Weissbier in the Marienplatz in Munich. Instead, you can spend it on hangover medication!

You get sources for brewing publications, associations, equipment, supplies and all the rest. This is one of, if not the best, brewing book I've seen yet. Well illustrated. An absolute must for the beer snob who dreams of brewing the best. Consider it while I open a brew. 6x9 paperback 150 pages
Cat. no. 6047

\$12.95

Basics of Brewing



**GUIDE TO BETTER WINE AND
BEER MAKING FOR BEGINNERS**

by S. M. Tritton

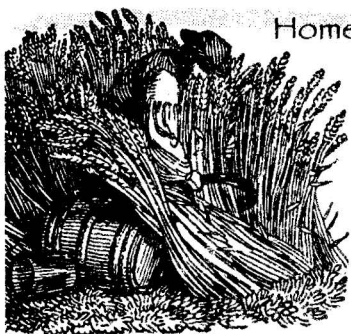
There are many books on making beer and wine, and this may not be the very best or the most modern. But what you get is value. You get the basic processes and the recipes at a very reasonable price.

"Almost anything that grows (and honey too) can be made by the most inexperienced beginner into a delicious wine: almonds, apricots, bananas, beetroots, bilberries, carnations, chamomile, cherries, cloves, corn, currants, dates, figs, ginger, golden rod, green-gage plums, hawthorn, lichi fruit, marrow, oak leaves, oranges, pansies, rosehips, tangerines, tomatoes, as well as grapes, are a few of the 125 fruits and vegetables for which wine, beer and liqueur recipes appear in this A-Z guide.

Explicit diagrams make the techniques simple to acquire. You will also find all the information needed to 'nurture' the wine to the peak of perfection: racking, stabilization, clarification, fining, blending, bottling and storing are covered in sufficient detail to assure a product in which you can pride yourself."

A great book to get started with. A reprint of the 1965 original. Consider it. 5 1/2 x 8 1/2 paperback 157 pages
Cat. no. 609

\$4.95



Homesteading, Survival, Alternate Energy, and more....

PRESERVE YOUR MEAT!

THE CANNING, FREEZING, CURING & SMOKING OF MEAT, FISH & GAME
by Wilbur F. Eastman Jr

Here's a great reference book that will allow you to preserve meat for the future. You get a mixture of plans, tips, how-to instructions, and recipes for preserving all types of meat with all types of processes.

Chapters include Basic Information, Canning, Freezing, Curing, How to Build a Smokehouse, Beef and Veal, Pork, Lamb, Poultry, Game, Fish, and Recipes.

You'll learn to process meat inexpensively and safely. If you hunt, fish, or raise livestock, you can use the techniques of early settlers and explorers who had no refrigerators.

No, I didn't see anything on pickling those pesky alligators that live in New York sewers. Or was it the Chicago sewers? But I did see tips on just about everything else. A classic book first released in 1975 and updated in 1989. Excellent book. Get a copy.

5 1/2 x 8 1/2 paperback 202 pages
Cat. no. 61



\$9.95

MAKE YOUR OWN SAUSAGE!

HOME SAUSAGE MAKING
by Charles Reavis

Make great mouthwatering sausage! Over 32 types – both fresh and cured. It's all here! Make summer sausage, Genoa salami, mild salami, bratwurst, frankfurters, bologna, kielbasa, Braunschweiger, chicken sausage, and varieties from bison, squirrel, opossum, rabbits, and even fish! You get over 175 recipes in this great how-to manual and cookbook! Order a copy. 8 1/2 x 11 paperback 168 pages
Cat. no. 635

\$13.95

Make Booze & Fuel!

PRACTICAL DISTILLER

by Leonard Monzert

reprinted by Lindsay Publications

Make moonshine! Poison yourself! Go blind!

From 1889 comes this little gem of a book showing how to distill "Brandy, Gin, Rum, Whiskey, Arrac, Poteen, etc., all of which owe their respective intoxicating properties to the amount of alcohol which they contain."

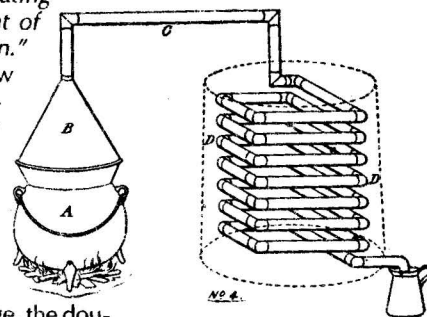
While other books show you how to make fuel alcohol, this one will show you the equipment you need to make booze. Included are discussions on the still and appurtenances, the farmer's still, directions for erecting a distillery, running a charge, the doubler, distillation of liquors, rectifying or leaching, alcohol refining, distillation of volatile oils, extracts, the water bath still, essences and liqueurs, blending and compounding and more.

Making booze without a permit is illegal. The government wants its taxes. You can use the equipment to make fuel alcohol for your car, perfume, and even vinegar.

If you intend to make booze, you're on your own. Moonshine stills were made with galvanized iron, old radiators, and other nasty metal that could poison you. Besides, "white lightning" tastes like lightning because it isn't aged or mellowed in barrels. It's nasty stuff. And you'll find little information here on turning out really good whiskey. This is a book on equipment, not gourmet cooking.

A great curiosity. Rare information. I won't tell the WCTU or BATF you're ordering copy. 5 1/2 x 8 1/2 paperback 156 pages
Cat. no. 4589

\$8.95



SUNELCO - The Sun Electric Company

If you're looking for electrical equipment to set up your own generating station, you might want to write for this catalog. In it you will find large solar panels, controllers, many storage batteries, monster inverters, pumps, low-voltage lighting systems, refrigerators and more. And it's all for sale. Not from us. From them. If you're interested, send \$5 to



SUN ELECTRIC COMPANY
PO Box 1499
Hamilton MT 59840-1499

Tell 'em you read about here.



WOODCARVER'S PRIMER

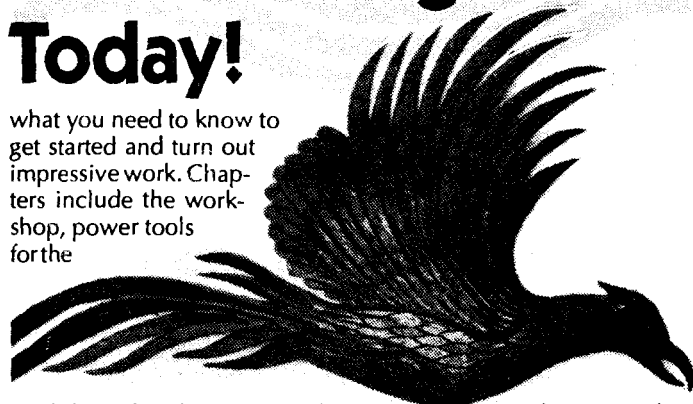
by John Upton

If I could carve wood just half as well as Upton, I would be very proud. And so would you. And you can carve that well if you learn the lessons Upton teaches you in this book, and if you practice, practice, practice.

Twenty six chapters will teach

Start Carving Wood Today!

what you need to know to get started and turn out impressive work. Chapters include the workshop, power tools for the



workshop, hand tools, bench tools, sharpening edged tools, kinds of carvings, designs and techniques, and more.

Then you get fourteen different teaching projects including carving a dolphin in the round, carving a Bremen eagle, a fed-

eral mirror with eagle, stars and scallop shell, and others. Loaded with pictures, hints and tips, and good how-to. A great way to start wood carving! Get a copy. 8x10 paperback 160 pages

Cat. no. 455

\$10.95



Order the Books You Want Today!

They may not be here tomorrow. That's no idle threat, my friend. Four of the new books lined up for this catalog had to be deleted at the last minute because they went out of print. That means the publisher is no longer printing them. I have a sample copy for my library, but I can't get you one. They're gone.

Many other books in this catalog can disappear overnight. When you finally order them tomorrow, we'll have to return your order and tell you that you missed the boat.

If you see something you must have, order it today. You may never have another chance!

FUEL FROM WATER

by Michael A. Peavey

Here's the best book of its type that I've seen yet. You'll read about hydrogen generators, storage devices, modifications of autos for using hydrogen fuel, the hydrogen homestead and more. You'll learn about batteries and inverters for providing 110 VAC for the home without connecting to the power company. You get lists of manufacturers, other books, and sources of additional information. This well illustrated, typewritten manual gives you what is obviously hard-to-find information.

Nicely done. I'd like to offer more books like this. Rare information. I think you'll like it. 8 1/2 x 11 paperback 80 pages Cat. no. 2010

\$16.00

AUTOPOWER

Automobile Generator Conversions & Modifications

by S. W. Duncan

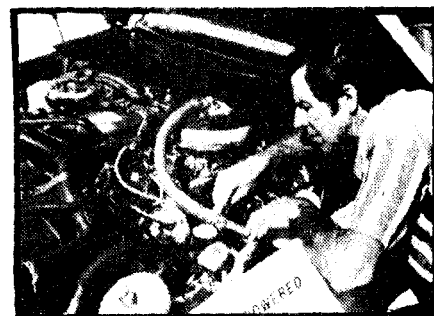
reprinted by Lindsay Publications

From out of the Great Depression comes this unusual book on ways to make auto generators produce unusual amounts of power. The major problem with this book is that the generators shown being rewound are no longer available. Even if you were to find one of the units listed, it would now be a hard-to-find part for an antique car. If you were to rewind one of these antique generators, I'd personally drive over and "smack you up 'long side the head!"

If that's the case, then why would I reprint something like this?

Simple. The principles taught here can be applied to modern generators, DC motors, starter motors and more. You get detailed, practical how-to that can be adapted to modern needs. In other words, this is raw material for your brain. I can't guarantee your success, but I can guarantee that the info you find here is rare, and that you'll get your money's worth.

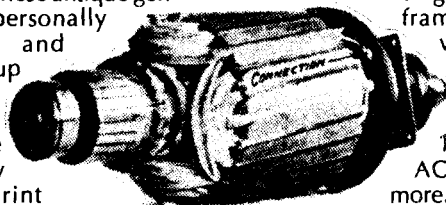
Chapters include changing a Ford Model A generator to a 110 volt alternator, get constant voltage at variable speed, converting a Dodge 12 volt generator into a 110 volt 500 watt alternator,



FUEL FROM WATER

AUTO POWER!

changing a Model-T to 110 volt AC, making field and armature coils, changing a Delco generator to 110 Volt AC, the winding of automobile armatures, characteristics of DC generators, suggestions on mechanical construction of generators, figuring a new winding for an old frame, converting a farm light plant to 110 volt AC, and more.



We reproduced this from a stained, greasy, and obviously used copy of the original 1935 edition. We managed to clean it up to a remarkable degree, but the type is light in some places and some photographs are dirty. Although it's not perfect, it reproduced surprisingly well all things considered.

Get a copy of this. It's great even if it is old. This is one of those manuals that people talk about having seen years ago, but can no longer find. It's worth having just for reference. Order a copy today. 5 1/2 x 8 1/2 paperback 56 pages Cat. no. 4791

\$4.95

Homesteading, Survival, Alternate Energy, and more....

WINDMOTORS

WINDMOTORS

by F. E. Powell

reprinted by Lindsay Publications

Put the wind to work with one of these turn-of-the-century designs.

You'll learn about different types of windmills, some of them unusual. Then you'll be shown how to build a model tower windmill similar to those in Holland.

Chapter 3 will show you how to build a real power-producing windmill with three foot diameter sails. It may be a small windmotor, but it can drive a small dynamo. You get all the important design details.

In Chapter 4 you are shown how to build a 6 foot diameter windmill capable of driving a 30 watt dynamo at 16 mph. You'll see many detailed drawings showing how the all-wood machine is built, and how metal gearing brings the power down to ground level.

Another chapter reveals a 10 foot diameter windmotor. The last chapter gives you tips on generating electricity—high tech in 1910! Obviously better generators are available now, but the basic principles still apply, and the control methods still work.

I think you'll enjoy this book. These mills may not be as hot as modern designs, but building one of these babies should be relatively easy and low-cost. You get great designs from a simpler time when simpler materials were used to get surprisingly good performance.

A really nice little book to have. Low cost. Get a copy.

5 1/2 x 8 1/2 paperback 88 pages well-illustrated

Cat. no. 4279

\$6.50



SAMSON WINDMILLS

SAMSON OIL-RITE WINDMILLS

by Stover Mfg. and Engine Co.

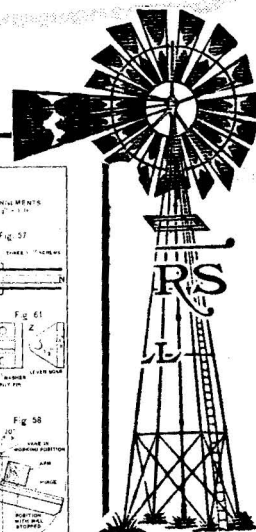
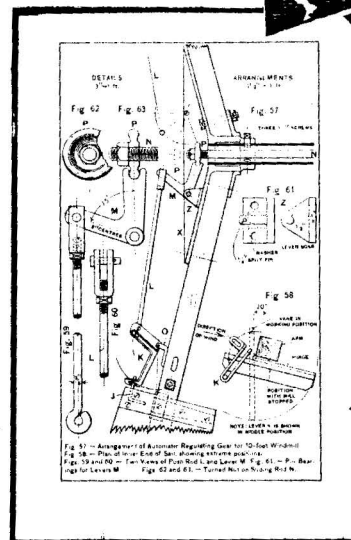
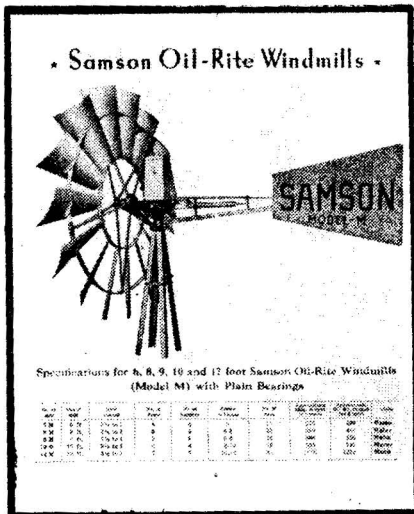
Just about every farm at the turn of the century located in the Midwest and Plains states had a windmill to pump water for livestock. Here's the sales catalog for one of the leading manufacturers of those mills.

You'll see all the mechanical details: the gears, bearing, vanes, pumps, and the rest. And you'll get complete specifications.

If you're interested in wind power, this is a great reference, since these mills were built to perform and last. I'm sure many are still in operation. If you're going to design your own windmill, it might pay to look at a proven design. And besides, the price is right. 8 1/2 x 11 booklet facsimile reprint 22 pages

Cat. no. 2011

\$4.50



Windpower for Home and Business

WIND POWER FOR HOME & BUSINESS

Renewable Energy for the 1990s and Beyond

by Paul Gipe

Good books and new books on alternate energy are hard to find. Here's one that is both new and good.

From the back cover:

"This is the most comprehensive guide to modern wind machines available. These rugged, cost-effective designs are suitable for homeowners, farmers, and small business owners already served by electricity, as well as for those who want to live 'off the grid,' beyond the reach of utility lines. Whether powering all or only a portion of a user's needs, modern wind turbines make economic and environmental sense today.

Wind Power for Home and Business is for those who want to know how wind energy works, and how they, too, can tap this abundant renewable resource. It explains how to measure the wind, how to estimate the output from typical wind turbines, how to evaluate the best technology for each application, and how to install and operate a small wind power system safely..."

Chapters include introduction, how to use the wind, measuring the wind, how much to expect, does wind pay?, what works and what doesn't, towers, cutting costs - not corners, buying a wind system, interconnection with the utility, stand-alone power systems, pump-

ing water, siting, installation, operating and maintaining a small wind system, safety, looking to the future, and appendices.

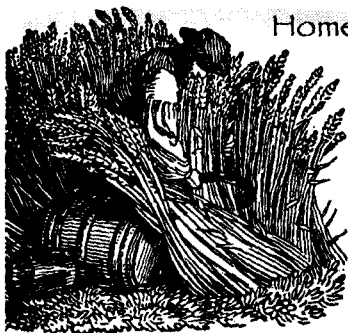
You get a well-written information-packed book that will deliver loads of information. By far my biggest complaint is the price. I think it should sell for half the price, but I can't do anything about that. I guess the publishers figure that not that many people are that interested in the wind. And I know from experience how expensive it is to publish small quantities of book. The price has to be high.

The good news is that it IS a good book. The bad news is that you're gonna have to pay if you want it. If you want it, then order it soon. It may soon get bumped out of this catalog in favor of other books. Consider it carefully. 6x9 paperback 413 pages

Cat. no. 2030

\$35.00





25 KITES THAT FLY

by Leslie L. Hunt

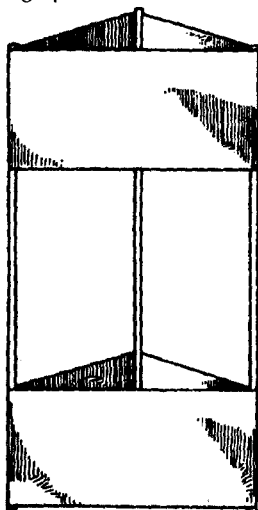
Next time your wife complains that you spend too much time in the shop and not enough time socializing with your in-laws, tell her to go fly a kite. Hand her this book when you do.

Learn about kitemaking in general. Learn how to make tailless kites such as a butterfly kit, a yacht kite, or a bow kite. Or try making a plane-surface kite such

25 KITES TO MAKE

as an English kite, five-point kite, or an elephant kite. And you can make compound kites such as a square box kite, a military kite, or a cross kite. You also get chapters on flying hints, accessories you can build, and miscellaneous useful information.

A great reprint from 1929. Low cost! So affordable, in fact, you can give a copy to each of your in-laws, and tell 'em all to go fly kites! ...while you slip off to the shop. Get a copy. 5 1/2 x 8 1/2 paperback 110 pages Cat.no. 467 \$2.95



Build a Sundial!

SUNDIALS

Their Theory and Construction

by Albert E Waugh

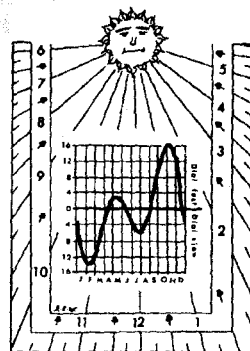
From the back cover:

"Have you ever wanted to build a sundial or to understand how one works?... This book is designed to meet sundialing needs at either the simple or the sophisticated level...."

The subject matter is arranged in 19 chapters, each covering a different aspect of dialling science. All the common types of dials are covered, but the reader can also learn about analemmatic dials, polar dials, equatorial dials, portable dials, memorial dials, armillary spheres, reflected ceiling dials, cross dials and old-fashioned noon marks. There are also sections on dial furniture, mottoes, the actual laying out of a dial, the equation of time, finding time in other cities, how to find the meridian, how to find time by moonlight even how to estimate time from the length of one's own shadow! Directions are given for designing dials for any part of the country, or any place in the world. The author has designed many dials, and his text is filled with helpful hints based on his own personal experience. There are over 100 illustrations, charts and tables, followed by an appendix which is filled with material which reduces or eliminates the need for calculation on the part of the reader...."

Good book - one we've offered in the past. If you haven't built a dial, give it a try. Great science fair or summer project for kids. Inexpensive. Interesting. Get a copy. 5 1/2 x 8 1/2 paperback 230 pages

Cat. no. 45



Build a Stringed Instrument!

MAKING STRINGED INSTRUMENTS

A Workshop Guide

by George Buchanan

In this well-illustrated book you get "detailed plans and instructions for violin, classical guitar, jazz guitar, viola, cello, mandolin, and mandola." Although this is a good-sized book, I at first thought there couldn't be enough detail on each instrument to make the book really worth reading. Not so. Lessons applied to one instrument readily apply to others. Stradivari not only built violins, he built violas, cellos, and double basses as well. Because these instruments are all related, you'll find there really is a surprising amount of detail.

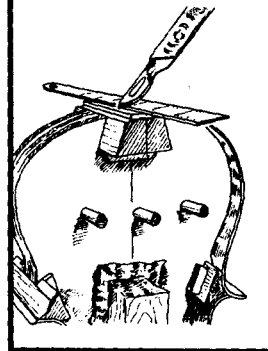
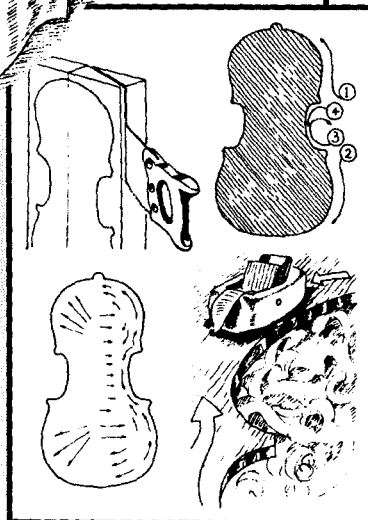
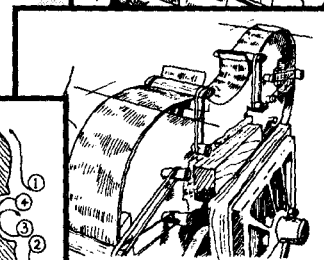
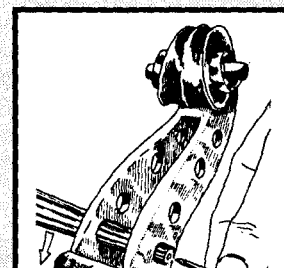
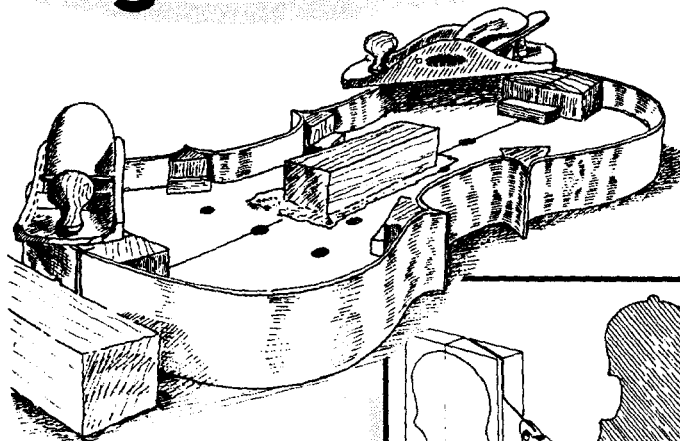
Most of the detail and basic techniques are revealed in the first section on building violins and violas. By the time you get to the jazz guitar in the back, you're getting only the details specific to that instrument.

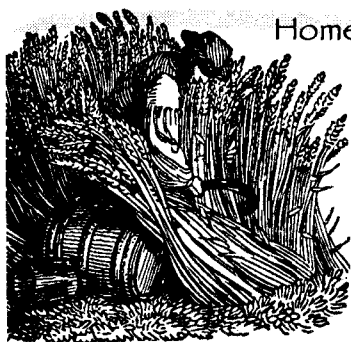
Again, I find it to be a fascinating book, beautifully illustrated

with line drawings and photos (color photos included) - one that makes me want to drop all 200 of my other projects and build a fiddle. Even if I never build a fiddle, I can do it my dreams by just reading this. You can, too. Try it. Good book. You'll like it. A bit expensive, but worth it, I think. 7 1/2 x 9 1/2 paperback 205 pages

Cat. no. 491

\$19.95





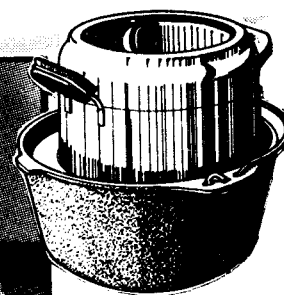
Make Cheese!

CHEESEMAKING MADE EASY
by Ricki & Robert Carroll

Make your own cheese! Good stuff! The authors will tell you how, in easy-to-understand terms – from simple Cottage Cheese

and Mozzarella to delicious Blue, Gouda and Colby cheese. You'll be surprised how easy it is. How little equipment you'll need. How inexpensive, particularly if you have a source of cow's or goat's milk. And how delicious the results, even on your first attempt. Choose your favorites from sixty different varieties.

Great book! Great photos, drawings and recipes. I'm gonna half to start making parmesan and romano for my "full-tilt" lasagna.



Maybe I'll even raise a herd of goats in the warehouse to supply milk. So if the books you order in the future smell like an old goat, you'll know...

Get a copy. A skill practiced for centuries, but one that few people know. But you will. Order today. 8 1/2 x 7 paperback 136 pages Cat. no. 653 \$9.95

Grow Food in Chemicals! Horrors!

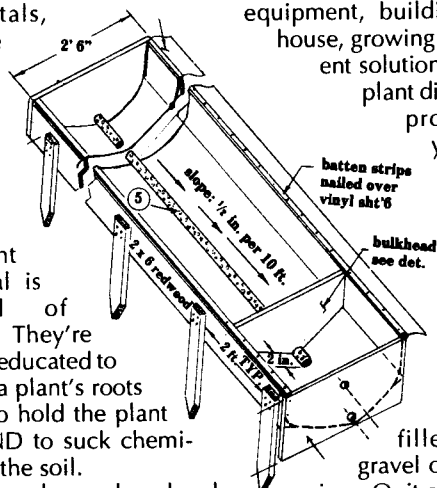
HOME HYDROPONICS AND HOW TO DO IT!

by Lem Jones

People are SO ignorant! If you tell them that it's possible to grow plants in chemicals, they immediately think of PCB's, heavy metals, even the ozone layer. They're horrified! They never stop to think that every plant and animal is composed of chemicals. They're too poorly educated to know that a plant's roots are there to hold the plant upright AND to suck chemicals out of the soil.

I'm sure you know a bonehead like this. Get a copy of this and give it to them. They need educating.

For the rest of us, we can amaze the boneheads by growing tasty giant tomatoes in sand, vermiculite or pebbles in the dead of winter! They won't know how it's done. In fact, look at all the people that travel through the pavilion at Epcot Center in Florida that features hydroponics. They come out believing it's high-tech. Nuts! It's been around for at least a century!



This is an updated and revised edition of a classic book that has been in print since '77. Chapters cover history, simple systems, equipment, building a greenhouse, growing media, nutrient solutions, plant care, plant diseases, insect problems, and you get a list of reference materials and suppliers.

Hydroponics can be as simple as a 10" oval pan on a simple wooden frame filled with pea gravel or wood shavings. Or it can be an intricate greenhouse with pumps and timers and lights. It's whatever you want it to be.

Get a copy of it. If you can develop a giant form of Venus Flytrap that eats mothers-in-law, let me know. I'm in need! Otherwise grow some potatoes or sweet corn. Sunflowers might be difficult. Great first book. Get started! 5 1/2 x 8 1/2 paperback 142 pages Cat. no. 610 \$12.00

The Manhattan Chili Co. – SOUTHWEST AMERICAN COOKBOOK
by Michael McLaughlin

While you were out watching the neighbor woman through your binoculars, I was in the kitchen with a three gallon stock pot converting eight pounds of course-ground chuck roast in the best damned chili you've ever tasted. And long after your neighbor woman throws an obscene gesture at you and pulls down the shade, I'll be eating full-tilt chili out of the freezer.

You get 65 different recipes for all kinds of things like Numero Uno, the Real McCoy (my favorite), Texas Chain Gang Chili, Abilene Choral Society and Music Guild Chili, High Plains Buffalo Chili, and more. You get recipes for unusual things like Carnitas Salad, Salsa Mayonnaise, Fajitas of Grilled Pork with Chiles Chipotles and much more.

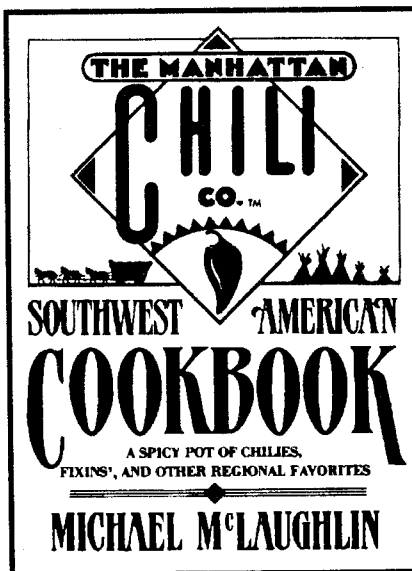
You'll get inside tips and secrets like how to toast your own cumin seed

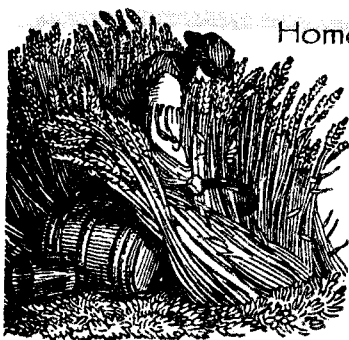
to improve its flavor and how to create your own custom chili paste. There are "secret" sources listed in the back for acquiring the best chilis, herbs and spices.

You even get a chapter on deserts showing you how to make Mississippi mud, triple citrus ice, coconut-lime cheesecake, and a lot more.

This is my favorite chili cookbook of several I've collected in recent years. 'Tain't nothing better than some red hot chili over linguini dusted with freshly grated Romano cheese and a big glass of champagne or a stein of Bass Ale. Try it!

Get a new coating of tin applied to your cast iron stomach. Throw the ol' lady out of the kitchen, pour yourself a stiff drink and start cooking. It's fun. Being a voyeur is fun, too, but I need to fill my stomach more often than my eyes. So cook! Get a copy! 6x9 hardcover 120 pages Cat. no. 6052 \$14.00





Homesteading, Survival, Alternate Energy, and more....

BUILD A HOUSE!

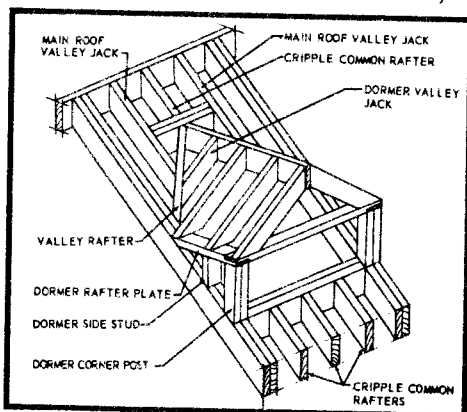
BASIC CONSTRUCTION TECHNIQUES for Houses and Small Buildings Simple Explained
by Bureau of Naval Personnel

Learn carpentry! Maybe you

could build a regulation Marine barracks in your backyard!

"Many homeowners have at one time or other considered building their own home or adding an extension to their present house. One of the best backgrounds for such home construction is offered by the manual which the U.S. Navy has prepared for use in its own classes.

Detailed chapters cover such basics of construction as: concrete - selecting the mixture, using forms and joints, reinforcing, placing, finishing, and curing concrete, and using concrete for foundations, floors, beams, columns, and walls; masonry - selecting bricks, mortar



and patterns, laying concrete blocks, structural clay tile, stone, and brick, insuring watertightness and proper bonding, and using brick for door and window sills and lintels; woodworking - using and selecting tools and materials; rough carpentry-building framings for foundations, floors, walls, and roof; exte-

rior finishing-finishing cornices and roof, installing asbestos-cement siding, insulation and outside wall covering; interior finishing - completing ceiling, walls, stairs, window sashes, casings, and doors, adding baseboards and trim, and plastering, stuccoing, and setting tile; and painting - selecting the paint, preparing surfaces and using techniques for the most efficient and most permanent job.

Other chapters cover related subjects and techniques...."

Lots of useful instruction at a reasonable price. Yes, you even get plans for regulation latrines. Your mother-in-law will love that! Get a copy. 6 1/2 x 9 1/4 paperback 568 pages over 675 illustrations
Cat. no. 589

\$12.95

BUILD A BIRD HOUSE!

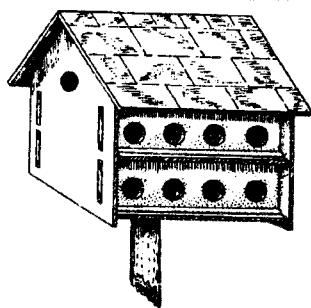
COMPLETE BOOK OF BIRDHOUSE CONSTRUCTION

by Scott Campbell

Build a birdhouse! It's easy. Learn about designing the roof, cleanouts, drainage and ventilation, entrance holes, the interior, the requirements of the birds, how to support a birdhouse, about inspection, pest guards, and more.

When your children or grandchildren ask you how to build a birdhouse, you don't have to admit you don't know how. Whip out this booklet and get underway. Or give it to them as gift. Dirt cheap! good. 5 1/2 x 8 1/2 booklet 48 pages
Cat. no. 6010

\$1.95



CIRCULAR SAWMILL BLADES

CIRCULAR SAWMILL BLADES

reprinted by Lindsay Publications

These pages, reprinted from two different 1880's books, will show you how to make, set and true up circular saw blades. You'll get a brief lesson on setting saw teeth and on hammering a bent circular saw blade back into truth — only a few pages long but the best explanation I've been able to find yet.

Pages from the second book "Leffel's Construction of Mill Dams and Bookwalter's Millwright and Mechanic" from 1881 will reveal how two different sawyers of 30 years experience take a sheet of steel and layout a 50" circular sawblade from scratch. This method pro-

duced blades able to saw, before resharpening, as much as 4500 feet of bark-covered hardwood taken from the Missouri river still embedded with sand and grit.

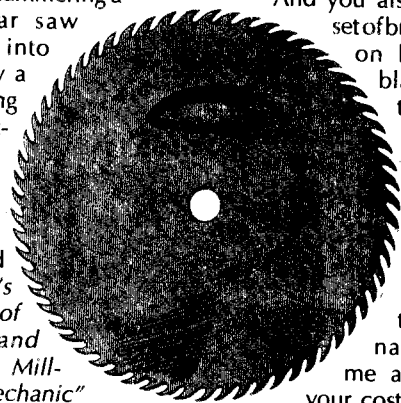
And you also get another set of brief instructions on hammering a blade back into truth.

Rare information! Anyone even thinking of building or running a sawmill MUST have this. The original books cost me a fortune, but

your cost is practically nothing when you consider the rarity of the information. Order a copy! 5 1/2 x 8 1/2 booklet 22 pages

Cat. No. 896

\$3.50



CIRCULAR SAWMILL

THE CIRCULAR SAWMILL

by Chuck Wendel

Yes, I know. You want plans to build a 36" circular saw mill. The plans are not in this book. And they're not in any book that I've ever seen. But what IS here is the greatest collection of sawmill illustrations and descriptive text that I've ever seen.

Chapters include Introduction, Historical Background of the Sawmill, Sawmill Builders, Historical Notes, Sawmakers, Setting Up and Check the Sawmill, Hammering and Adjusting Circular Saws, Mechanics of the Sawmill, Sawmill Accessories, Model Sawmills, and Bibliography.

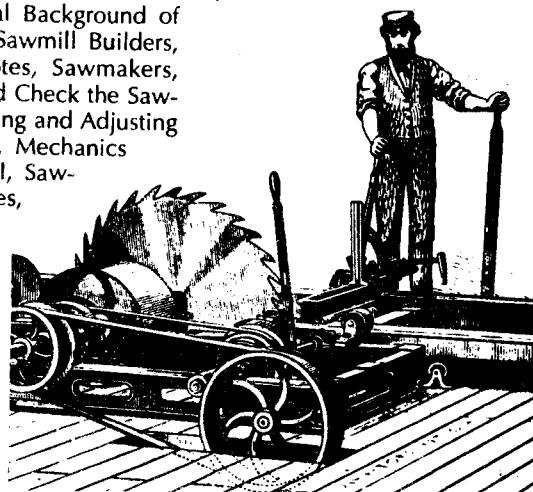
This is not a huge book, but you'll find more here on sawmills than I've ever seen in one place

before. And it's wall-to-wall illustrations!

If you're interested in this type of thing, then get a copy. It's excellent. Recommended. And reasonably priced, too! 8 1/2 x 11 booklet 68 pages

Cat. no. 1299

\$9.00

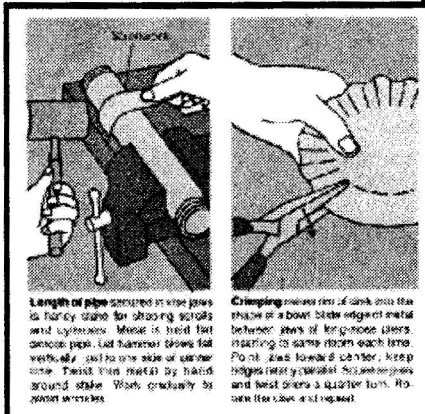


by Readers Digest Association

Chapters include creating a home workshop, leather-working, macrame, decoupage, candlemaking, papier-mache, basketry, spinning and dyeing, weaving, batik and

You get step-by-step photographs and drawings that will give you countless ideas. Each section is written by an expert. Even if you never try half the projects shown, you'll still find this a worthwhile book. Great for the reference library. Consider it. I think its great. 10 x 8 1/2 hardcover 456 pages
Cat. no. 579 \$24.95

\$24.95



**Wall-to-Wall How-To
Heavily Illustrated!**

BACK TO BASICS

How to Learn and Enjoy Traditional American Skills

by Reader's Digest

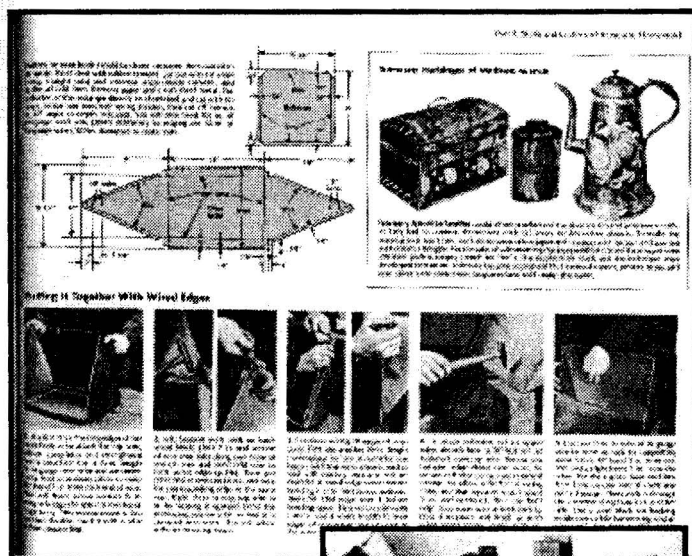
Topics include: buying country property, planning your home, preparing the site, converting trees into lumber, building a log cabin, building with adobe, building a stone house, raising a barn, developing a water supply, fences, heating with wood, waterpower, wind power, solar energy, the kitchen garden, fruits and nuts, grains and grasses, beekeeping, fish farming, livestock,

preserving
produce,
making
dairy prod-
ucts, maple
sugaring,
homemade
beverages,
baking
bread,
cooking



You'll be impressed by easy-to-read text and quality illustrations throughout. Obviously each chapter could be a book in itself, so information is limited. But it's enough to get you started. At the end of each section you'll find a list of quality reference books that will help you push on.

You'll learn how to estimate the flow of a creek and use a hydraulic ram, smoke hams and fish, skin a rabbit and tan its hide.

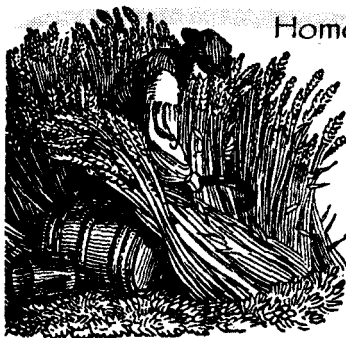


Great book! Lots of things to try. Just plain fun to read even if you never try a thing! A bit expensive, but it delivers. If you're thinking about being more independent, this is a must-have book. Recommended. 11 x 8 1/2 hardcover 456 pages

Cat. no. 2027 \$26.00



Homesteading, Survival, Alternate Energy, and more....



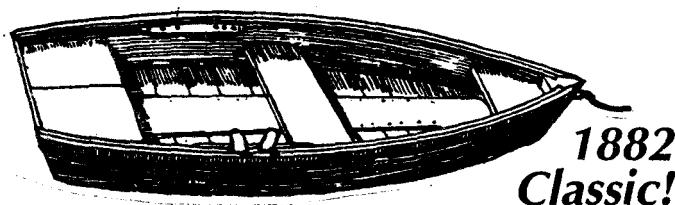
American Boys Handy Book

by D. C. Beard

"If Huckleberry Finn were to settle down, somewhere out there in the territory, and decide to become an author, he might very well come up with a book like

this one..." — Washington Post Book World

"The Handy Book was the perfect survival manual. It contained plans for 16 kinds of kites and hot-air balloons and fishing tackle. It told you how make and stock an aquarium, to construct a water telescope and how to camp out without a tent. Or in a hut made from



**1882
Classic!**

pine boughs. How to build 10 kinds of boats, including a flatboat with a covered cabin. Ice boats, too. One-person canoes. Bird calls. Squirt guns with astonishing range and authority..." — Henry Kisor, Chicago Sun-Times

As a kid I read an original copy in our small town library. This is a classic book. Get a copy! 5 1/2 x 7 1/2 paperback 441 pages
Cat. no. 6034 \$10.95

CHEAP TRICKS

CHEAP TRICKS

100s of Ways You Can Save 1,000s of Dollars

by Andy Dappen

You can get twice the mileage from your money by applying the tricks you'll find here.

"Even with a small income, you can save for a house, vacations, education, or a new car, but you must know the secrets of stretching a dollar. Cheap Tricks shares these secrets — it puts your dollars on the rack and stretches them 'til they scream."

You get over forty short chapters dealing with appliances, banking, babies and children, car repairs, credit cards, dental, dental tips, heating, insurance, lawns, medical expenses, showers, stains, telephones, and much more.

Some tips are quite simple, like get a clothes drier that turns off when a moisture sensor says the clothes are dry. A dish washer full-loaded can clean as many dishes for the hot water used as washing by hand. Spraying glass cleaner to a TV screen can damage it. There's a better way. There are manufacturer hot line numbers to give you help in repairing your major appliance. The author saved himself \$60 in repairing his dishwasher.

Learn how to decode the numbers on side of a tire. When you buy a new tire, you'll know exactly when it was made, and you can avoid getting a tire that's more than a year old. Life insurance? You may not need it, but you'll never hear that from an agent.

You get thousands of little tricks and tips. Some are obvious. Many are not. Each can save nickels, dimes and dollars, and that will add up to a sizeable amount quickly. Staying alive is tough these days. And this can certainly help. Order a copy.

5 1/2 x 8 1/2 paperback 404 pages

Cat. no. 492

\$13.95

Tan Hides! Make Leather

TAN YOUR HIDE!

HOMETANNING LEATHERS & FURS

by Phyllis Hobson

Learn what you need to tan your own leather and fur, and all the steps involved in doing it right. If you hunt or raise animals for meat, you can convert the hides into beautiful leather. Once you do, you can use the special section in the back of this book to get started making mittens, fur hats, leather vests, holsters, belts, knife sheaths and more.

You'll find that tanning leather is very inexpensive, but is labor intensive — a lot of work. But that's part of the fun. How many people do you know tan their own leather?

The authors will tell you what tools and chemicals you'll need, how to select the hide, the steps for tanning leather and fur, how to test for tanning, old-time Indian tanning methods, how to make your own dyes, what qualities of leather to look for, which tools you need for leatherworking, basic leatherworking techniques, where to find tools and supplies and more.

This is a classic book first published in 1977 and is now in its 17th printing! Excellent book. Also useful for keeping your mother-in-law in line. Next time she hassles you, threaten to tan her hide. Show her this book, and she'll know you mean it! Get a copy! 5 1/2 x 8 1/2 paperback 135 pages

Cat. no. 62

\$8.95



HOMESTEAD!

Tell the Boss to Shove It!



FIVE ACRES AND INDEPENDENCE

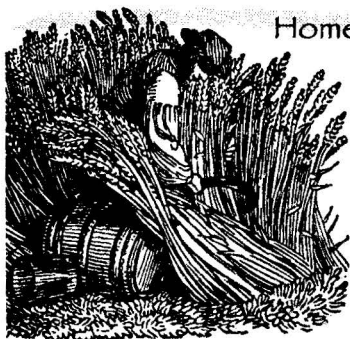
by M. G. Kainb

Tell the boss to hang it, and move to the open country and homestead! It's possible. This reprint of the 1935 original will show you as it did thousands during the Depression how to survive comfortably on five acres. You'll learn about greenhouses, coldframes, soil, manure, fertilizers, compost, tools, weeds, orchards, pruning, grafting, seeds, transplanting, berries, things to sell every day, grapes, storage, and much more. There's so much info here at such a low price, you can't afford not to have a copy. 397 pages

5 1/2 x 8 1/2 paperback

Cat. no. 608

\$6.95



Stay Alive in the Woods!

HOW TO STAY ALIVE IN THE WOODS

by Bradford Angier

"For over twenty years, sportsmen, hunters, and camping families have been carrying this book with them every time they venture into the woods. It is a life-saving tool which details all of nature's resources and shows — in 26 clearly written, illustrated chapters — how to find food, water, warmth, and shelter when lost or stranded.

The book is full of secrets that can help save time, energy — and even lives. For example, it tells: how to spark a fire by using a drop of water as a lens; how to obtain meat and fish by primitive means; and how to protect yourself against natural hazards..."

That pretty well says it. This "drug-store" paperback is wall-to-wall practical tips and how-to. Lots of quality information for a low price. A classic! Get one! 4 x 7 mass paperback 285 pages. Cat. No. 682 \$8.00

DUMPSTER DIVING!?

THE ART & SCIENCE OF DUMPSTER DIVING

by John Hoffman

I gave up alley-picking years ago. I had to. The warehouse was full, and I needed the space to store pallets of books. But you may still be at it. If so, you'll probably enjoy this.

Comments from the backcover:

"Dumpster diving takes you on a roller-coaster tour of America's back alleys. You'll see amazing wealth carelessly discarded: Food — tons of it — in clean, sanitary packaging; Clothes, often freshly washed and folded; Building Supplies; Furniture; Toys, Cassettes and CDs' Books; Flowers; Photographs; Documents and much more!

Dumpster Diving will show you how to get anything you want — anything you need — absolutely free!!! in step-by-step, illustrated detail, John Hoffman shows how to dress for dumpster diving success, work your neighborhood dumpsters, dive a restaurant, use food salvaged from dumpsters, use a 'bag blade' and 'dive stick', handle run-ins with the authorities, convert your trash to cash and much more...

As you learn the secrets of an extraordinary Master Diver, you will hear outrageous anecdotes from a lifetime of garbage picking. Watch as the author eats from bloated cans! Look away as he dives into hospital waste! See a relentless information diver shut down an abortion clinic!..."

This is a bizarre book. In some ways, just plain trashy. But there ARE some tips to making money alley picking, and there ARE references to

other books (I haven't seen yet) on making money by collecting scrap.

I'm not going to tell you this is a great book. But it IS one of a kind. And there IS, more than likely, useful information in it for you. Especially if you're wondering whether it's worth doing or not.

Consider it. So-so illustrations. Unusual content. And stay away from MY dumpster.... 8 1/2 x 11 paperback 152 pages

Cat. no. 6051

\$12.95



OVER 600,000 COPIES SOLD

HOW TO STAY ALIVE IN THE WOODS

A complete guide to food, shelter, and self-preservation that makes starvation in the wilderness next to impossible!

BRADFORD
ANGIER

Will You Survive?

OUTDOOR SURVIVAL SKILLS

by Larry Dean Olsen

From the back cover:

"This is the revised and expanded fifth edition of the classic manual on outdoor survival. Chapters on shelter, fire, water, plants, animals, and special skills explain how to:

- build a lean-to; brush, pole, or grass thatch, wickiup; wattlework shelter; snow cave
- make fire with flint, bow drill, hand drill, fire saw; make a fire carrier or bundle
- obtain drinking water from dew, water pockets, an evaporation still
- harvest and prepare food plants in the wild

- fashion tools and weapons from stone, bone and wood
- make rawhide, tan leather; weave bark and other natural fibers
- harvest grasshoppers, ants, grubs; trap, hunt and stalk larger game; make fish hooks, traps and spears"

With this information you can walk into the wilderness with just the clothes on your back and survive! Some people believe that the wackos in the mid-East might bomb us back

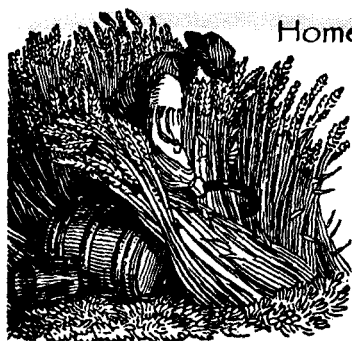
to the stone age (to quote Gen. LeMay). It might pay to be ready to live like a caveman!

Native Americans knew these things two centuries ago. But who knows today? You can! Get a copy. Well-illustrated. 6x9 paperback 224 pages

Cat. no. 6041

\$11.95





Homesteading, Survival, Alternate Energy, and more....

GREAT HOW-TO BULLETINS!

BACK-TO-THE-LAND BULLETINS

Each of these 32 page booklets published by Garden Way provides you with hints, tips, plans, and how-to to help you cut your cost of living, make life a little easier, and provide you with more independence. You'll find the information useful and accurate, and available at a cut-rate price.

EASY GAME COOKERY

Loads of recipes for everything from squirrels, 'possums, and coons to bear, rattlesnake, and trout. Great variety.

Cat. no. 2008

\$2.95

BAKING WITH SOURDOUGH

Learn how to make a sourdough starter and use it to make a variety of delicious breads and biscuits like the gold rush prospectors did.

Cat. no. 2006

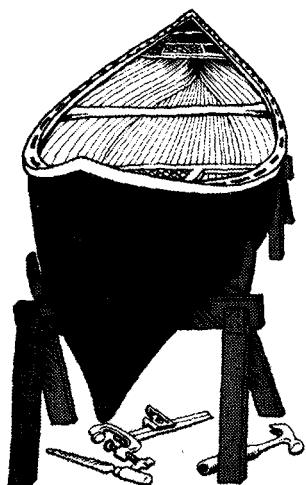
\$2.95

COOKING WITH DRIED BEANS

Beans are nutritious and low cost. Learn how to make soups, spoon bread, and other recipes. You'll eat better for less money.

Cat. no. 2020

\$2.95



EGGS AND CHICKENS

A quick education into raising birds for meat and eggs. You get tips on feed, vaccinations, equipment and more. Written by an expert.

Cat. no. 2021

\$2.95

BUILD A SMOKEHOUSE

Plans and instructions for building four different smokers and smokehouses. Well illustrated, but no smoking recipes.

Cat. no. 684

\$2.95

BUILD A POND FOR FOOD & FUN

Select a site, clear it, and build a pond to raise fish, swim, or ice skate in winter. Learn all the important basics.

Cat. no. 289

\$2.95

BUILDING A WOOD STRIP CANOE

Introduction into building a fiberglass covered wood strip canoe. You get sources for wood, fiberglass and detailed plans of various types. Great introduction into the process.

Cat. no. 2022

\$2.95

BUYING AN OLD HOUSE

If you're dreaming of buying a cheap old house and fixing it up into a mansion, start with this book. Learn where to find trouble when you're inspecting an old house.

Cat. no. 2023

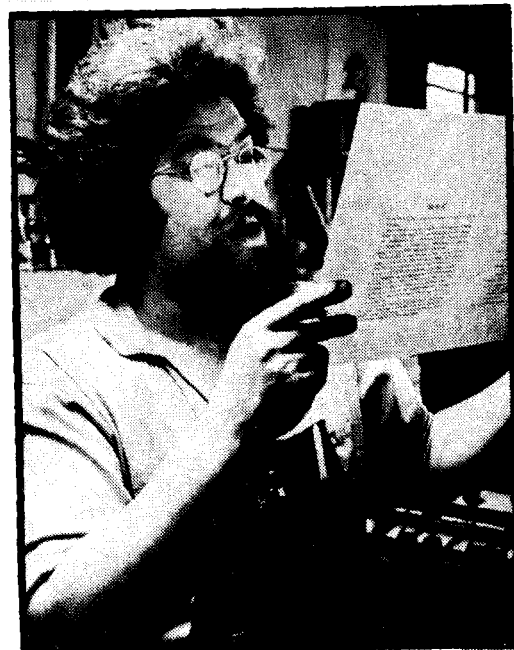
\$2.95

KEEPING BASEMENTS DRY

Learn the interior and exterior treatments possible to seal up your basement and make it useable again. It CAN be done if you know how.

Cat. no. 288

\$2.95



PRINT! PRINT!

PRINTING IT

by Clifford Burke

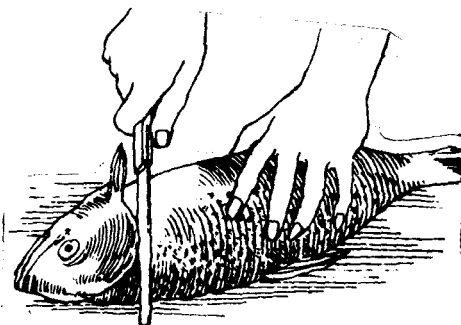
Back cover: "Here is everything you know to produce anything - from a poster or a handbill to a complete book - with style and beauty, and without expensive equipment. *Printing It* is already the standard guide for the novice and, judging from the growing number of printers and publishers who keep it on their reference shelves, it is destined to become a classic."

I think their claims are inflated. But! This first came out in 1972 and it IS now a classic. If you don't know diddly-squat about printing, this is the place to start. You'll learn about typesetting, pasting-up, camera-copy and all the terms you'll need to get your product into print. There is even some material on being a printer. You'll learn what double burns and reverses are, how to bind booklets in a simple manner, and even how to talk to printers (although I'm not sure all of them CAN talk...)

If you're just getting ready to buy some printing, you gotta have this, my friend. It's a classic. 5 1/2 x 8 1/2 paperback 127 pages

Cat. no. 69

\$5.95





Silk Screen Printing

COMPLETE BOOK OF SILKSCREEN PRINTING PRODUCTION
by J. I. Biegeleisen

Take an old picture frame, cover it with cloth, glue a stencil to it, and you have a primitive silkscreen. You lay it on paper, cardboard, or a tee-shirt, put thick ink on the other side and use a squeegee to force the ink through the stencil. You've printed your design. It's that simple.

You can print signs, shirts, decals, wallpaper and much more without expensive equipment. This book will show you how to do everything from building the simple

frame to multi-color printing.

Silkscreen is versatile and low cost. It's a skill you should have. Here's a dirt cheap book that will show you how.

5 1/2 x 8 1/2 paperback 253 pages illustrated
No. 424

\$5.95

STAINED GLASS CRAFT
by Divine & Blachford

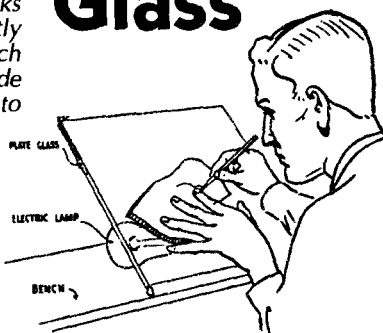
"...prepared by two foremost British workmen and designers, it is one of the very few books that tell the beginner exactly what he needs to know: such topics as determining which side of a piece of cathedral glass to make the cut on, planning cuts to avoid accidental fracture and splintering, tap breaking, making circular indentations and eccentric shapes, avoiding design weaknesses, bending kames without closing them, holding kames in place, fitting glass, soldering, cementing, and similar material. All of this is essential to the craftsman who wishes to design and make his own freeforms, mobiles, pendants, or decorations..."

If you're wondering whether stained glass is worth trying, this is the book to get. It's low cost and tells you how to make everything from small decorative items to large windows. After you've read this, other more-expensive books will direct you in the specific direction you will want to go.

A great beginning book at a low price. Reprinted from the 1940 original. Even if you don't intend to do stained glass, you can learn to be an expert glass cutter. Order a copy. 5 1/2 x 8 1/2 paperback 115 pages
Cat. no. 567

\$3.50

Stained Glass



THE ART & CRAFT OF HANDMADE PAPER

by Vance Studley

From the backcover: "If you can chop vegetables and boil water, you can make paper. It's easy with this fascinating step-by-step guide to making paper with vegetable fibers. No special tools are required and quality results can be had in a very short time."

Oh, I know. You're intending to build a space shuttle (and you're probably daffy enough to think you can do it!) so you can send your mother in law into orbit. I admire your ambition, but can you make something as simple as paper? Simple, common paper?

I've made paper. It's fun and satisfying. You can, too. Here you get info on the history of paper, methods, the mold and tools you'll need (easily made),

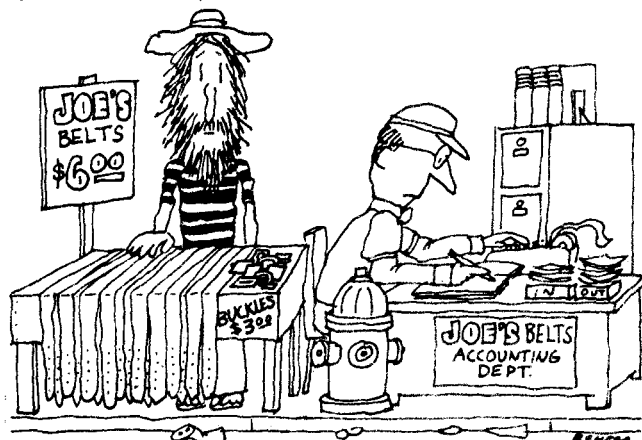


MAKE YOUR OWN PAPER

and complete instructions on the process. The author is an artist, so the last chapter describes artistic things you can do with the paper pulp.

Make paper. You'll enjoy it. Get a copy of this book. You'll enjoy it, too. Inexpensive! 8 1/2 x 11 paperback 112 pages
Cat. no. 43

\$6.95



Be a Small Time Operator!

SMALL TIME OPERATOR

"How to Start Your Own Small Business, Keep Your Books, Pay Your Taxes & Stay Out of Trouble!"

by B. Kamoroff, CPA

Probably the biggest nightmare that anyone launching a business experiences is the paper work. Yet Kamoroff, a certified public accountant, will show you how to slip into a profitable business with the least red tape and fewest hassles.

Learn about: markets, locations, financing, name registration, licenses, permits, sales tax, federal ID numbers, insurance, and choosing a business name. Chapter two will introduce you to bookkeeping, making it about as painless as possible. The third

chapter will teach you about expanding your business: hiring help, keeping a payroll, partnerships, and corporations. You'll learn practical procedures for figuring taxes, deductions, balancing bank accounts for farmers, how to handle bad debt, and more. And you'll find plenty of examples.

An excellent book that teaches the difficult aspects of business. Must reading. 8 1/2 x 11 190 pages - easy to understand
Cat. no. 68

\$14.95

Electricity at HIGH PRESSURES & FREQUENCIES

ELECTRICITY AT HIGH PRESSURES AND FREQUENCIES

by Henry L. Transtrom

reprinted by Lindsay Publications

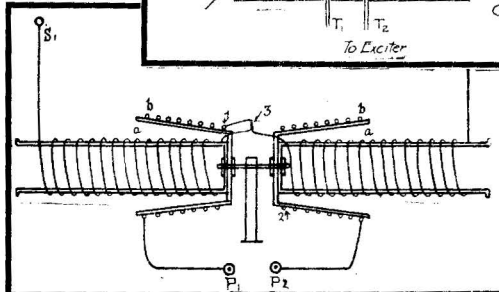
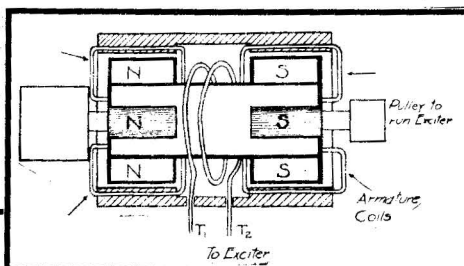
This off beat book on high voltage appeared in 1913 and was revised again for publication in 1921. Its chapters have no names. There appear to be 139 illustrations.

The entire first part of the book covers electrical theory on electricity, how it is produced by generators, ideas of induction, ampere-turns, frequency and the phase shift that occurs through reactive elements and much more. This isn't heavy stuff — practical theory that builders can use, more or less translations of "heavy" engineering theory. This is great material for the experimenter in induction coils, Tesla coils, Oudin coils, and other lightning bolt generators.



You won't find much how-to, but you will find details about existing equipment, how it works, simple calculations on performance, and some remarkable photographs of experiments that can be performed with a lightning bolt generator.

Chapter 13 on page 165 talks about the fact that Tesla, Fessenden and others have not been able to generate frequencies over 100,000 Hertz (cycles per second). Then they



show you a Fessenden alternator driven by a 10 hp DC motor through gears that revolves at 20,000 rpm that kicks out over 2,000 watts of high-frequency high voltage!

You'll then read about capacitive machines. You'll see a device that develops 15,000 volts between two ends of 25 feet of No. 4 aluminum wire! Another photo shows a 10 volt 5 watt Mazda lamp is lit to full brightness although apparently short circuited by 6 inches of No. 00 copper wire! It shouldn't work, but it does. You'll see a high-frequency transformer that throws heavy 60" sparks between its terminals. Other photos show unusual high voltage experiments. The last 20% of this book is worth the price of the entire book!

This is another must have for the high-voltage library — a book that is very difficult to find in used book stores and so on. Get yourself a copy. You'll like it. Excellent book! 5x7 paperback 264 pages Cat. no. 20544

\$11.95

TESLA COIL SECRETS

by R. A. Ford

Be the first on your block to blast your neighborhood with high voltage! Shock the socks off your friends and relatives! Zap those pesky cats digging in the garbage can! Make people think you really are building a Frankenstein monster in your basement!

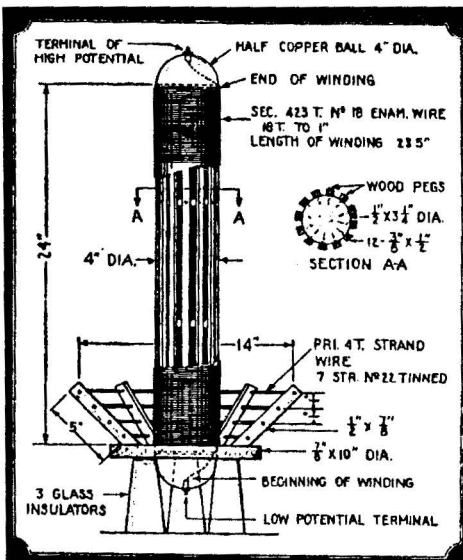
A Tesla coil is a resonant, air-core, high-voltage transformer developed by Nikola Tesla at the turn of the century to generate lightning bolts and to investigate the wireless transmission of electrical power.

Now you can dig through the private scrapbooks of an avid Tesla researcher who has built several coils. You can study his collection of articles, clippings, and notes that took years to assemble. You'll see all the interesting hints, plans, and wiring diagrams gleaned from early magazines that ceased publication decades ago along with formulas, notes, and observations he believes are important for building powerful coils. Many of the old articles are so detailed that you can probably use them to build a powerful experimental coil. There are notes on one machine the could kick out five foot lightning bolts!

If you're really into Tesla coils, you may have seen a few of these clippings already.

TESLA COIL SECRETS

But I'll bet there are others you haven't seen. You'll get info on rotary spark gaps, anti-kickback devices, Leyden jar capacitor construction, conical Tesla coils, Oudin coils, and suggestions on research into wireless power transmission, plant growth stimulation, medical uses, and more.



Many of the reprinted articles are fuzzy and a few hard to read. Most have been enlarged to bring out the construction details, and have been reprinted in their entirety. The difficult searching has been done. You can spend your time building and experimenting.

Be warned! You'll be working with high-voltage high-frequency devices from another era. Tesla coils can be very dangerous. But maybe you can be the one to rediscover the secrets Tesla didn't have time to pursue or reveal.

Rare info! Too bad the book isn't ten times bigger. Get a copy for the reference library if for no other reason. Interesting reading. Recommended!

5 1/2 x 8 1/2 paperback 74 pages Cat. no. 4317

\$6.95



Who Was Nikola Tesla?

TESLA: MAN OUT OF TIME

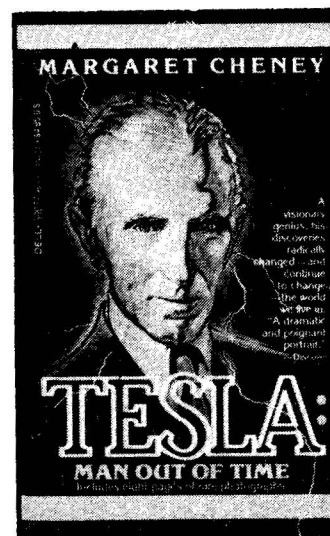
by Margaret Cheney

"Flamboyant, eccentric, almost supernaturally gifted, had he been born today he would still be ahead of his time. Called a madman by some, a genius by others, and an enigma by nearly everyone, Nikola Tesla was perhaps the greatest inventor the world has ever known..."

"It was Tesla who harnessed the alternating electrical current that we use today... Tesla who actually invented radio... Tesla who invented fluorescent lighting and the incredible bladeless turbine. He introduced us to the fundamentals of robotics and computer and missile science, which continued to create and transform the future..."

There are many books about Tesla, some of them are garbage written by groupies who worship Tesla as a god. Here's a great factual biography that has gotten great reviews — the story of a wizard who was Edison's enemy, Mark Twain's friend, and J. P. Morgan's client. This is the real story. Excellent book at a reasonable price. Order a copy. 310 pages "mass" paperback a few photos
Cat. no. 717

\$5.95



LAKHOVSKY MULTIPLE WAVE OSCILLATOR HANDBOOK

compiled by Thomas J Brown

Supposedly sometime before World War II, Russian experimenter Lakhovsky asked Nikola Tesla to help him design a high voltage generator that could produce electrical energy at many different frequencies simultaneously. A model of the machine was tested by physicians of the time who found that it not only had a 98% cure rate for terminal cancer, arthritis, and other "hopeless" diseases, but that it could rejuvenate plants and animals as well.

No doubt the oscillator works and is an interesting piece of equipment, but I wouldn't stake my health or anyone else's on it. Quack medicine machines were everywhere in the 1920's & 30's. This could well be another.

In this typewritten report you get historical details, wiring diagrams, construction tips, articles on waves that heal, "documented" cases of cure, reprints of the Lakhovsky patents, and a series of reprinted magazine articles on the use of radio frequency waves to cure disease.

Modern physicians have found that electrical fields can speed healing of wounds in some instances. Perhaps this material has some merit, or perhaps it's all a hoax. Maybe it's another suppressed invention. You figure it out. You'll find it interesting reading — a very unusual collection of material. Get a copy. 8 1/2 x 11 paperback 144 pages
Cat. no. 357

\$17.95

Tesla Turbine

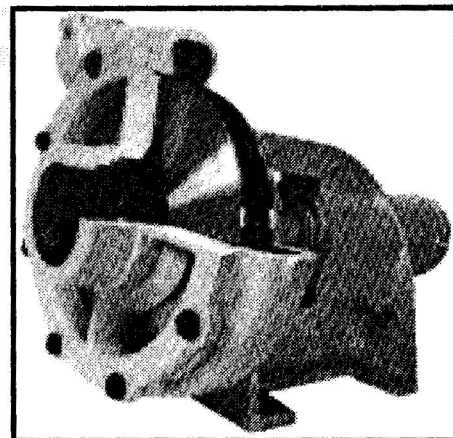
BOUNDARY LAYER BREAKTHROUGH THE BLADELESS TESLA TURBINE

compiled by C. R. "Jake" Possell

In 1909 Nikola Tesla applied for a patent on his bladeless steam turbine that could generate ten horsepower per pound of weight. Actually, the patent granted in 1913 was entitled "Fluid Propulsion" because the turbine could also be used as an efficient pump. Today, Tesla fans claim that this turbine is the solution to many of our energy problems, and that the modern world is ignoring one of the greatest inventions ever. You'll have to decide for yourself.

Here you get a collection of articles on the turbine/pump. Chapters include Tesla's Turbine, A Lighting Machine of Novel Principles, Boundary-Layer fire pump, Tesla's Hover Craft, Bladeless Jet Engines, and much more. Sources range from the New York Herald Tribune and Motor World to Scientific American and papers by Tesla himself.

You get many photos of applications, reproductions of the original patent plus re-



lated patents and much more. You'll get info on sources of plans should you want to build such a device.

This is an offbeat, quality book on an unusual topic. You hear a lot about Tesla's electrical inventions, but little about his mechanical. Get a copy of this. 5 1/2 x 8 1/2 paperback about 185 pages
Cat. no. 1307

\$19.95

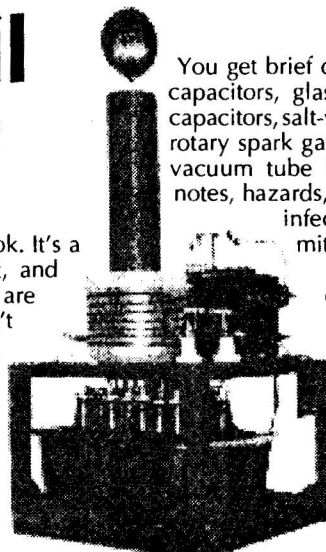
Tesla Coil Plans

TESLA COIL

by George Trinkaus

Here's another Tesla coil book. It's a bit expensive for what you get, and much of it is a repeat, but there are some bits and pieces that I haven't seen.

You get a brief overview of Tesla, his career and his coil. Then you get instructions on building a good sized coil using a neon transformer and a spark gap to drive the primary. The detail is not great but is probably adequate.



You get brief discussions and details on capacitors, glass-and-foil capacitors, oil capacitors, salt-water capacitors, series and rotary spark gaps, a schematic for a 6L6 vacuum tube driven coil, construction notes, hazards, Tesla lighting, ozone disinfector, and magnifying transmitter. All this in 21 pages!

Obviously, the booklet does not go into great detail, but there are ideas and clues here that you might not have thought of yet that might be worth the price and then some. You'll have to decide. Consider it carefully. 7 x 8 1/2 booklet 21 pages
Cat. no. 741

\$4.95

NIKOLA TESLA ON HIS WORK - AN EXTENDED INTERVIEW

edited by Leland I. Anderson

From the preface: "The surfacing of the transcript for this pre-hearing interview with Nikola Tesla by his legal counsel in 1916 resulted from an intensive search in archives of legal firms, some now defunct and other later acquired by contemporary interests. The interview was precipitated by numerous pending court cases as fledgling radio industry entered a period of fierce competition. Tesla's counsel believed the interview necessary not only in order to prepare for the pressing of his own claims against the Marconi

NIKOLA TESLA

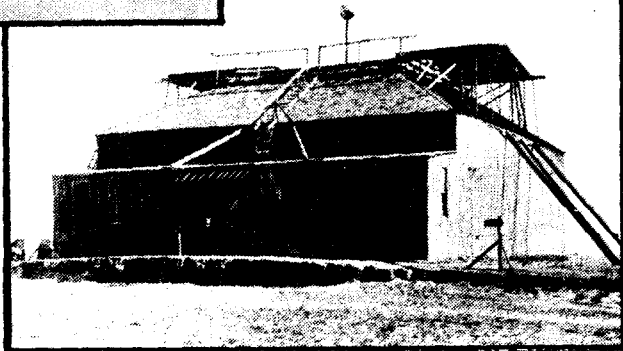
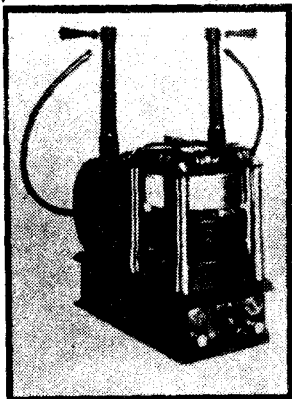
On His Work With Alternating Currents and Their Application to Wireless Telegraphy, Telephony, and Transmission of Power

Company, but also to protect his own patent interests when called to give expert-witness testimony in the upcoming litigation foray pitting a plethora of new communication companies and their captive radio pioneers as adversaries.

The text of this interview was, of course, never intended for publication. Counsel, concerned primarily with protection of Tesla's patent interests, ask questions almost exclusively relating to the priority of his patents and their application...

Most of the photographs accompanying this interview are in good condition, but those of schematics and mechanical drawings have suffered some decay with time..."

Chapters include high frequency alternators, experiments with wire-



less telegraphy and telephony, mechanical and electrical oscillations, damped waves, continuous waves, Colorado experiments, theory and technique of energy transmission, Long Island plant, arrangements for receiving, clarification of selected remarks, and even a description of the Long Island plant and inventory of the installation as reported in 1922 foreclosure appeal proceedings.

This is unusual, and apparently newly discovered, information about Tesla and his inventions in his own works. This is an expensive book, but well done and quite interesting. The Tesla buff will consider it a necessity. You get countless drawings and photos of Tesla coils, dynamos, condensers, his experimental plants and more. A lot of the illustrations you've seen before, but you'll no doubt discover new ones. Excellent book worth having. It's Tesla on Tesla. A cut above the rest. Get a copy. 8 1/2 x 11 paperback 237 pages

Cat. no. 392

\$40.00

THE TESLA COIL DESIGNER

by Walt Noon

"The Tesla Coil Designer has been written specifically to allow anyone with even the simplest knowledge of electronics to be able to design their own Tesla coil..."

The program has been written so that each component... can be individually calculated..."

Fire up your PC and design a coil.

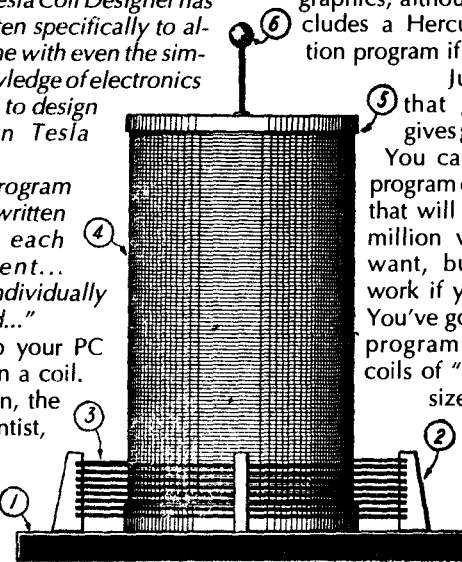
Walt Noon, the mad scientist, will provide you with a quality

copied to your hard disk for execution. You'll need at least CGA graphics, although Walt includes a Hercules emulation program if you don't.

Just realize that garbage in gives garbage out.

You can make the program design a coil that will deliver 250 million volts if you want, but it won't work if you build it. You've got to use the program to design coils of "reasonable" size and power.

There are physical limits that no computer program is



Tesla Coil Design Computer Program

design program that offers more sophisticated design features than programs offered at twice the price.

You get a 5 1/4 floppy and a small booklet which walks you through the design of a 200,000 volt Tesla coil. The program is not copy protected, and can be

going to know about. Coils giving 40" arcs have been easily designed and successfully built.

The price is right for this time saver. If you build coils, consider this carefully. One floppy and one 5 1/2 x 8 1/2 booklet

5 1/4" Cat. no. 391 \$29.95
3 1/2" Cat. no. 3002 \$29.95

program for IBM compatible computers!

- Highly Accurate
- Tested out to 40" arcs!
- Easy to Use
- Easy to Learn
- Reasonably Priced

Newest version includes calculations for top capacitance, toroidal terminals, spark gap design, and additional graphics.

What Coil Builders are Saying...

Dear Mr. Noon:

Thank you very much for the Tesla Coil Designer program. I found it very easy to learn and A HUGE TIME SAVER! The hours I used to spend calculating design parameters are now spent comparing various design limits. I have found your Designer to be extremely accurate in predicting coil frequency and discharge in the coils I have built since purchasing your program.... I have been very pleased with the way the program operates...

Richard T Quick, Glendale MO

Walt:

I purchased your IBM PC Tesla Coil software back in May, and I like the software very much...

Kim Kochersperger, Kokomo IN

The Very Best from the ELECTRICAL EXPERIMENTER MAGAZINE 1916-17

THE VERY BEST FROM THE ELECTRICAL EXPERIMENTER 1916-17

anthology by
Lindsay Publications Inc

You can go back to read the very best articles from one of the earliest hobbyist electronics magazines published. Gernsback's *Electrical Experimenter* was filled with basic information, ads for early equipment, and most importantly how-to projects designed to be built from the most primitive materials.

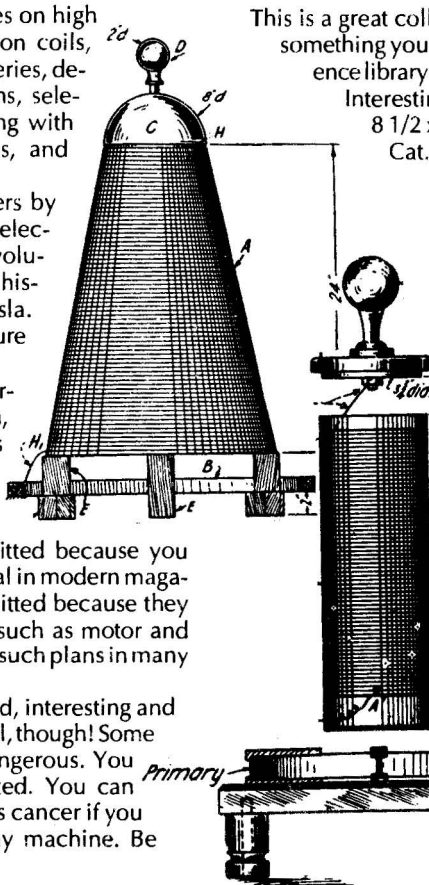
Readers learned how to build unusual crystal set receivers with unusual detectors, high power wireless sets, and all the equipment that went into their construction. Today, you buy electronic equipment, put batteries in it, and turn it on. Back then you built your batteries!

You'll find how-to articles on high voltage Tesla coils, induction coils, spark gap construction, batteries, detectors, water power systems, selenium cells for experimenting with primitive television systems, and more.

You get theoretical papers by MD's describing how new electrical equipment would revolutionize medicine. You get history on Fessenden and Tesla. You'll learn how to measure capacity, and much more.

You get the very best articles from this two year span, and by best we mean plans and information that is very difficult to find today. Many articles that cover the basics of electricity were omitted because you can find comparable material in modern magazines. Some plans were omitted because they were not unusual enough, such as motor and dynamo plans. You can find such plans in many old books.

What you will find is solid, interesting and useful information. Be careful, though! Some of this info is downright dangerous. You can get yourself electrocuted. You can give you and your neighbors cancer if you build and operate an X-Ray machine. Be very careful.



This is a great collection of rare material — something you should have in your reference library. Wall-to-wall illustrations!

Interesting reading. Order a copy!

8 1/2 x 11 paperback 108 pages

Cat. no. 20137 \$9.95

You should know that most of the photographs in this book are not of the best quality. Poor originals, yellowed paper, oversized pages have combined to make the photographs "muddy". The drawings are very sharp, and most type is quite readable, but the photos leave something to be desired. All we can say is that we did the best job we could. See what you think.

CONTENTS

Collin's Radiophone Arc
Detector, Spark Gap, Hints & Tips
Wrinkles, Recipes, Formulas
Water Wheel Drives for Private Lighting
Plants
Construction & Use of the Gold-Leaf
Electroscope
Marvels of Modern Physics (Electricity &
Medicine)
Vacuum Detector & How It Works
A Small Static Machine
Making Selenium Cells
Giant 48" Spark Coil
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Double Capacity Rotary Variable Con-
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Construction of High-Frequency Appara-
tus for Medical & Lecture Use
Use of High-Frequency Currents in Medi-
cal Work
How & Why of Radio Apparatus - Spark
Gaps
High Frequency Apparatus and Experi-
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36" Spark Tesla Coil for Lecturers
Amateur and Experimental Radio Research
Tesla's Views on Electricity & War
Suggestions for Radio Research Work
Converting a Tuning Coil into a Cabinet
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A Hand-Feed Arc for the Experimenter
X-Ray Tubes for High Frequency Coils
Selenium Cell Design & Construction
Home-Made Arc Search Light
A Simplified Variable Condenser
Constructing a 1/4 KW High Frequency
Oudin Coil
Construction of a Laboratory Vacuum
Pump
Regarding Tesla & Oudin Coils
How I Telegraph Pictures
How to Use High Frequency Currents in
the Treatment of Disease

TESLA'S EXPERIMENTS

with High Potential & High Frequency

EXPERIMENTS WITH ALTERNATE CURRENTS
OF HIGH POTENTIAL & HIGH FREQUENCY

by Nikola Tesla

"A lecture delivered before the institution of electrical engineers, London, by Nikola Tesla with an appendix by the same author on the transmission of electric energy without wire, reviewing his recent work, and presenting illustrations from the photographs never before published".

Quite a title! Quite a book! There's so much written and published about Tesla (and too much of it is pure garbage), that it is refreshing to have the inventor himself explain his experiments, theories, and plans. It's all here, every page from the original 1904 book — complete with unusual illustrations showing disruptive discharge coils, improved discharger and magnet, luminous discs, single wire and no wire motor, unusual electric lights for use with the high-frequency AC that is generated by the Tesla coil, and much more.

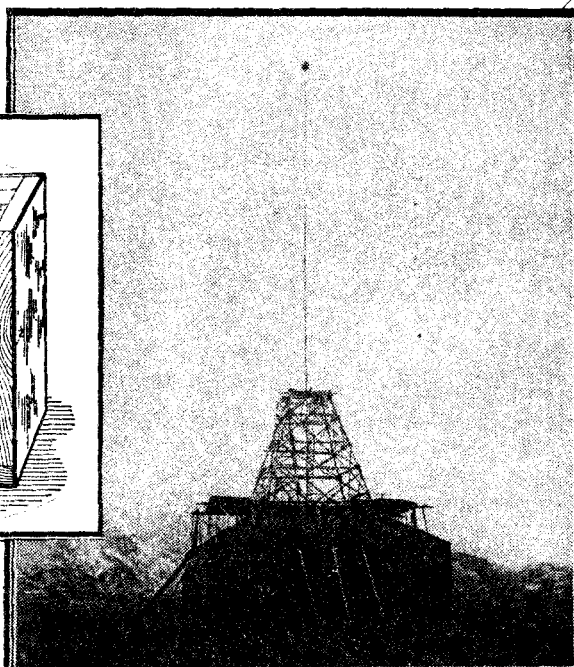
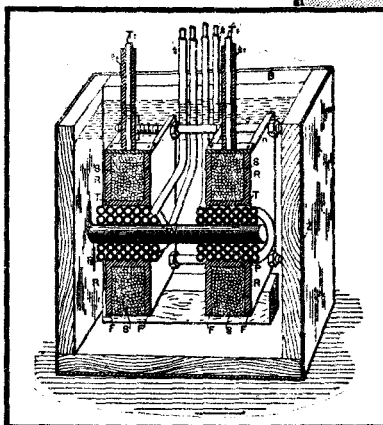
The last fourteen pages of the book is a reprint of Tesla's article from the March 5, 1904 issue of "Electrical World and Engineer" complete with photographs of the experimental apparatus at Colorado Springs and Long Island built to test the transmission of electrical power without wires.

Anyone who studies Tesla, builds his coils, or wants to perfect the inventions that Tesla didn't have time to finish should have a copy of this book. The writings of Tesla himself should be the cornerstone of any Tesla library, and here is your chance to get your own copy of this now-rare book. Interesting reading. Historically important. Get a copy.

5 1/2 x 8 1/2 paperback 170 pages.

Cat. No. 4392

\$9.95



Experimental Laboratory, Colorado Springs.

Power transmission without wires: the London Lecture plus a 1904 magazine article on the Colorado Springs experiments! Rare book!

HIGH FREQUENCY APPARATUS

by Thomas Stanley Curtis

reprinted by Lindsay Publications

By 1916 so much interest in induction, Tesla and Oudin coils had been generated by Electrician & Mechanic, Popular Electricity and Modern Mechanics, and The World's Advances magazines, that Curtis knew his book and high voltage equipment he manufactured would be a hit.

Because of their very nature, magazines could publish only brief articles on these lightning bolt generators. Curtis went the other extreme, and packed "Apparatus" with as much detailed information as he could find. Then he added suggestions for experiments and dozens of illustrations. The result is now a classic book, and original copies are so coveted that they're difficult to find.

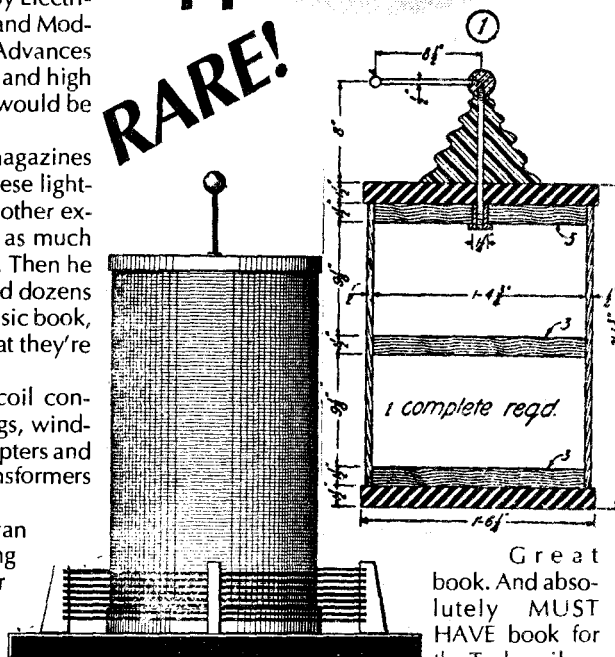
You get wall-to-wall how-to on coil construction. Tips on calculating windings, winding coils, making transformers, interrupters and spark gaps, and even the power transformers that drive the spark gap.

If you want to die young, you can build an X-ray apparatus. Use it long enough, and you and everyone in your apartment building will glow in the dark!

Build a grid and see for yourself if high frequency current really does affect plant growth. Build yourself a large coil that produces 50" lightning bolts, give lectures, and make people think you are a genuine made scientist.

"High Frequency Apparatus"

RARE!



Great book. And absolutely **MUST HAVE** book for the Tesla coil exper-

imenters. Get a copy for your high-voltage library. Quality. Order a copy today. 5 1/2 x 8 1/2 paper 247 pages well illustrated

Cat. no. 20030

\$12.95

CONTENTS

- 1 Alternating Current at Low and High Frequencies
- 2 How the High Frequency Current is Produced
- 3 The High Potential Transformer or Induction Coil
- 4 The Oscillation Transformer
- 5 The Spark Gap
- 6 Oscillation Transformers
- 7 Induction Coil Outfits Operated on Battery Current
- 8 Kicking Coil Apparatus
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- 15 Plant Culture with High Tension Current
- 16 High Frequency Plant Culture
- 17 A Foreword on the Construction of Electrical Apparatus for the Stage
- 18 Construction of Large High Frequency Apparatus
- 19 Large Tesla and Oudin Coils for the Stage
- 20 Construction of a Welding Transformer
- 21 Hints for the Electrical Entertainer
- Appendix Parts and Materials — How Much They Cost and Where to Get Them

**INVENTIONS, RESEARCHES &
WRITINGS OF NIKOLA TESLA**
by Thomas Commerford Martin
reprinted by
Lindsay Publications Inc

The greatest world's fair ever constructed was underway in Chicago in 1893. More electricity and more electric lights were used in the fair than in the entire city of Chicago. It was the electric age, and Edison was doing with commercial battle with Westinghouse and its star, Nikola Tesla.

In 1893, this volume, a comprehensive collection of Tesla's work to that point, was published. And although it is now quite rare, you can have a high quality reprint for a small fraction of what cost us to obtain an original copy.

Most people think of lightning generators when they think of Tesla, but that's a very narrow perspective. People should think of alternating current. Tesla created the power system used throughout the world today — one that operates at 50 and 60 cycles per second.

Tesla experimented with other frequencies, iron and air core transformers, as well as motors and generators. Tesla didn't just one day decide he was going to build his famous lightning bolt generator. It was but another step in a series of experiments that had begun years before. Here you get a complete record of this research up to 1893.

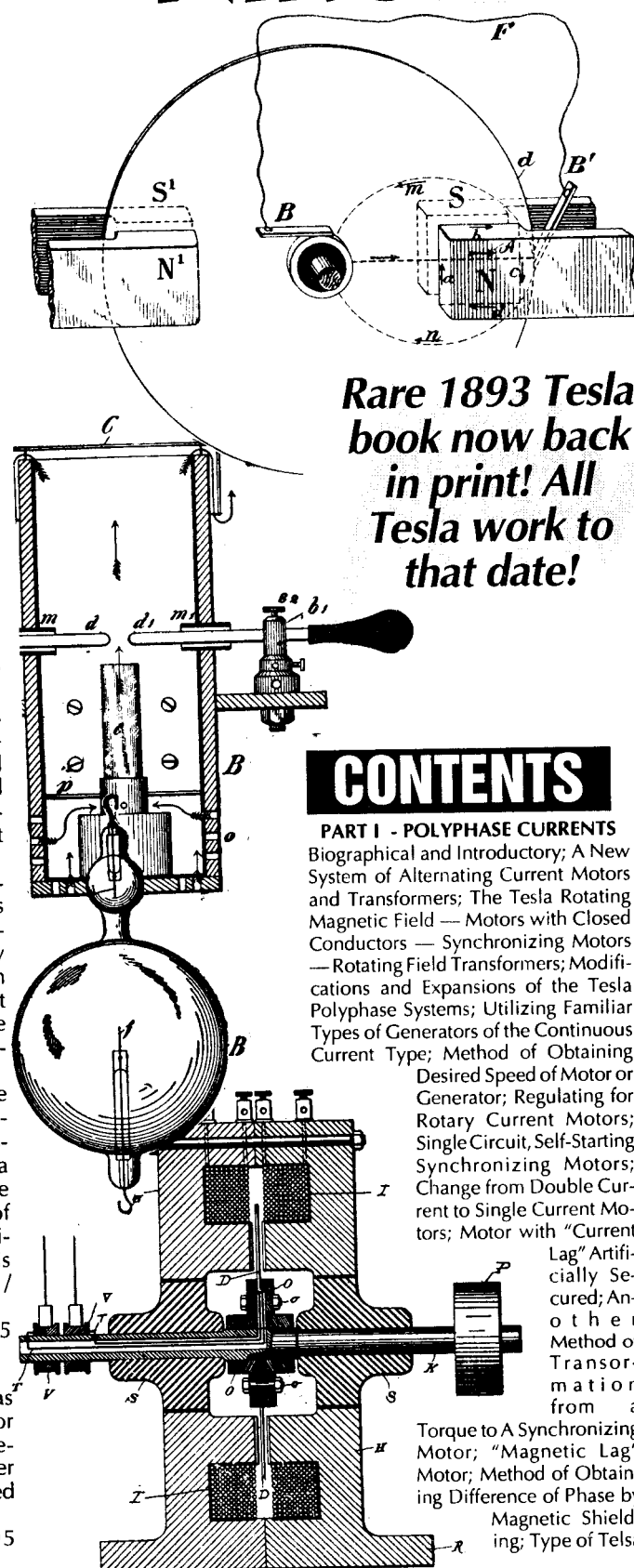
It's all here — the AC experiments and inventions that lead Tesla to experiment with ever higher voltages and frequencies, the neon tubes and fluorescent lights, unusual high frequency alternators and even magnet motors.

If you want to carry on Tesla's unusual research, you must walk in his footsteps. You must do your homework. Here in one volume is the early work that will help you get your mind in sync with his and perhaps suggest what he was thinking at the time, and give you ideas of where to take his experiments.

Every Tesla fan, every high voltage experimenter, and every electrical engineer should have a copy of this classic book. Just as much as Edison, Tesla created the world in which we live today. Now you can study the results of his research, attend his special exhibitions, and devour his lectures, with this single volume. Order a copy today! 5 1/2 x 8 1/2 paperback 496 pages
Cat. no. 4902 \$17.95

SPECIAL HARDCOVER EDITION
A small fraction of the print run has been beautifully hardcover bound for libraries, serious collectors and researchers. It is possible the hardcover edition may be unavailable for extended periods of time.
Cat. no. 4910 \$28.95

Inventions, Researches & Writings of NIKOLA TESLA



**Rare 1893 Tesla
book now back
in print! All
Tesla work to
that date!**

CONTENTS

PART I - POLYPHASE CURRENTS

Biographical and Introductory; A New System of Alternating Current Motors and Transformers; The Tesla Rotating Magnetic Field — Motors with Closed Conductors — Synchronizing Motors — Rotating Field Transformers; Modifications and Expansions of the Tesla Polyphase Systems; Utilizing Familiar Types of Generators of the Continuous Current Type; Method of Obtaining Desired Speed of Motor or Generator; Regulating for Rotary Current Motors; Single Circuit, Self-Starting Synchronizing Motors; Change from Double Current to Single Current Motors; Motor with "Current Lag" Artificially Secured; Another Method of Transformation from a Torque to A Synchronizing Motor; "Magnetic Lag" Motor; Method of Obtaining Difference of Phase by Magnetic Shielding; Type of Tesla

Single-Phase Motor; Motors with Circuits of Different Resistance; Motor with Equal Magnetic Energies in Field and Armature; Motors with Coinciding Maxima of Magnetic Effect in Armature and Field; Motor Based on the Difference of Phase in the Magnetization of the Inner and Outer Parts of an Iron Core; Another Type of Tesla Induction Motor; Combinations of Synchronizing Motor and Torque Motor; Motor with a Condenser in the Armature Circuit; Motor with Condenser in One of the Field Circuits; Tesla Polyphase Transformer; A Constant Current Transformer with Magnetic Shield Between Coils of Primary and Secondary.

PART II TESLA EFFECTS WITH HIGH FREQUENCY AND HIGH POTENTIAL CURRENTS

Introductory — The Scope of the Tesla Lectures; The New York Lecture. Experiments with Alternate Currents of Very High Frequency, and Their Application to Methods of Artificial Illumination, May 20, 1891; The London Lecture. Experiments with Alternate Currents of High Potential and High Frequency, February 3, 1892; The Philadelphia and St. Louis Lecture. On Light and Other High Frequency Phenomena, February and March, 1893; Tesla Alternating Current Generators for High Frequency; Alternate Current Electrostatic Induction Apparatus; "Massage" with Currents of High Frequency; Electric Discharge in Vacuum Tubes.

PART III MISC. INVENTIONS AND WRITINGS

Method of Obtaining Direct from Alternating Currents; Condensers with Plates in Oil; Electrolytic Registering Meter; Thermo-Magnetic Motors and Pyro-Magnetic Generators; Anti-Sparking Dynamo Brush and Commutator; Auxiliary Brush Regulation of Direct Current Dynamos; Improvement in Dynamo and Motor Construction; Tesla Direct Current Arc Lighting System; Improvement in Unipolar Generators.

PART IV APPENDIX ON EARLY PHASE MOTORS AND THE TESLA OSCILLATORS

Mr. Tesla's Personal Exhibit at the World's Fair; The Tesla Mechanical and Electrical Oscillators.

TESLA SYMPOSIUM

1990

PROCEEDINGS OF THE
1990 INTERNATIONAL TESLA SYMPOSIUM

edited by Steven Elswick

Here's another collection of practical, experimental, and just plain loonie ideas related but limited to Tesla. Some of this is fascinating reading, some a rehash of material available elsewhere, and the raving of some people who claim that scientists are all wrong, and that they have the knowledge that will totally change the world. In other words, this is a three ring circus.

Included are the Tesla Museum, the AC/DC war, a great paper by Jim Hardesty on X-Rays and Electron Beams (see the video in this catalog), 100 Years of Cavity Resonator Problems, Rediscovery of Tesla's RF Techniques, Computer Aided Design of Tesla Coils, Active Antenna for ELF Magnetic Fields, Tesla Technology and Radioisotopic Energy Generation, Current Tesla Turbine Technology, Non-Hertzian Scalar Energy and EM Energy: The Biological Connection, Nikola Tesla: Father of Bioelectronics, and the "good stuff": Tesla Wave Physics for a Free Energy Universe, Engineering Intro to Zero Point Energy, Tapping the Zero-Point Energy and Scalar Current, Nonlinear Dynamics, Nonconventional Energy and Propulsion Methods, High Voltage Concentric Field Generator Design, Energy Phenomenon, Experiments in Synchronicity, and the Gary Magnetic Effect.

You get a well illustrated volume of interesting reading. It's expensive, but the material is hard to find and is the only published documentation of the 1990 Symposium held in Colorado. If Tesla and bizarre science is your thing, then this is definitely for you. Get a copy. 8 1/2 x 11 hardcover over 350 pages

Cat. no. 768

\$49.95

1988 Tesla Symposium

PROCEEDINGS OF THE
1988 INTERNATIONAL TESLA SYMPOSIUM

edited by S. R. Elswick

Every year in Colorado, Tesla fans gather for a symposium to swap information. Here, in one convenient volume, are the papers presented at the 1988 meeting.

Chapters are collections of papers on a particular topic: Tesla history, Tesla coils, geophysical effects, electromagnetics, energy research, and gravitics. You get the Great AC/DC War, Tesla's Contributions to Electrotherapy, History of Laser Particle Beam Weapons, Tesla Coil - An RF Power Processing Tutorial for Engineers, Computer Simulation & Experimental Verification of Tesla High Voltage Machines, Earth-Ionosphere Cavity Magnetic Field Spectra in the 3-30 hz Band, Demonstrating A Zero-point Energy Coherence, Phenomenon of Electric Charge Generation by Space Rotation, Studies on Rotation Leading to the "N" Machine, Recent Developments of Levitation, Maxwell's Lost Unified Field Theory, and ten more! Although not heavily illustrated, you do get a number of drawings, circuits, charts, and there is plenty of math in places.

This is an unusual book, to say the least. It is a must-have for Tesla fanatics, anti-gravity people, perpetual motion people, and the fringe-science crowd in the general. I can't tell where the hard science ends and the speculation and alternate science theory sets in. So you know it's unusual! It's expensive, but worth having. Consider it carefully. 8 1/2 x 11 hardcover about 320 pages

Cat. no. 385

\$49.95

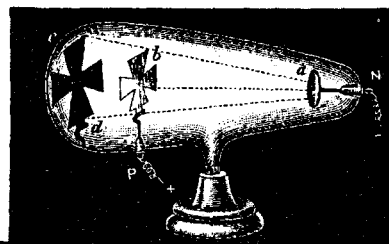
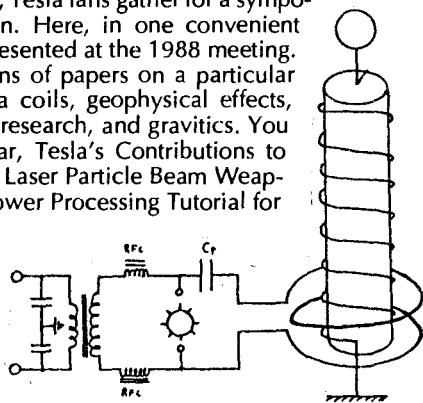
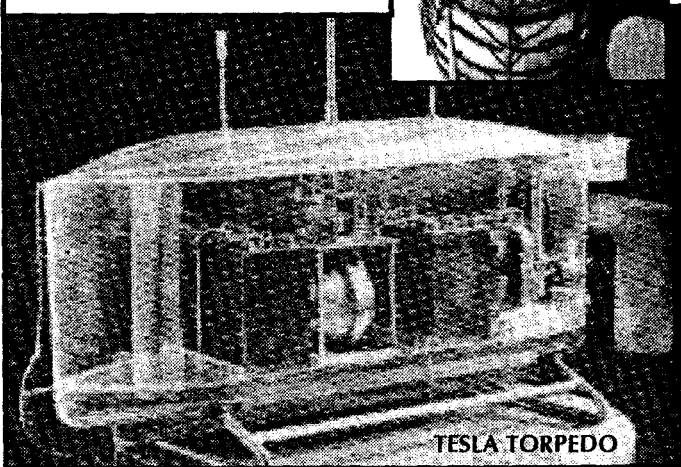
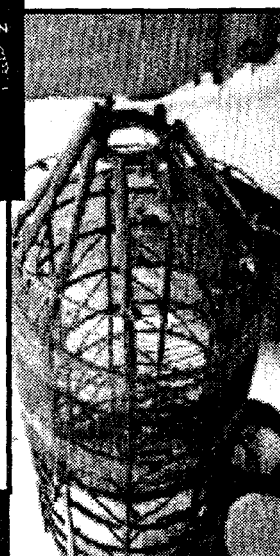
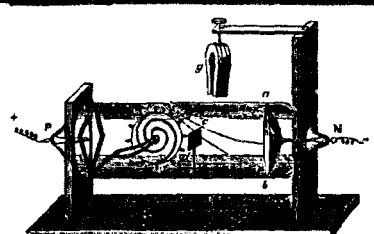


Figure 16. A later form of the Crookes Paddle-wheel Tube



TESLA TORPEDO

Tesla's Lost Inventions

TESLA:
THE LOST INVENTIONS

by George Trinkaus

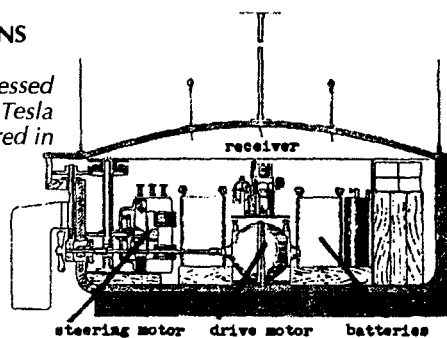
"Here are the suppressed inventions of Nikola Tesla all in one place rendered in clear English and in 42 illustrations. Tesla was famous at the turn of the century for inventing the alternating-current system still in use today. But his later inventions,

documented in some 30 U.S. patents between 1890 and 1921, have never been utilized as Tesla intended despite their obvious potential for advancing in fundamental ways the technology of modern civilization. Among these lost inventions: the disk-turbine rotary engine, the tesla-coil electric energy magnifier, high-frequency lighting systems, the magnifying transmitter, wireless power, and the free-energy receiver." —from the front cover.

Like Trinkaus's other Tesla book, the only criticism that can be leveled here is that the chapters are too short. Interesting, unusual information, especially if you're just beginning your study of Tesla. Fairly priced. 8 1/2 x 7 booklet 34 pages

Cat. no. 748

\$5.95



STRANGE PLANS!

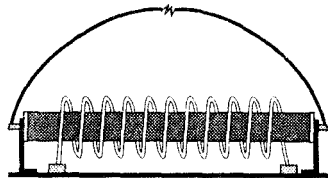
TESLA COIL

PLANS & INSTRUCTIONS TO BUILD THE "MINI" TESLA ELECTRIC SPARK COIL

by John F. Nuyen

You get a small booklet, typewritten booklet with practical how-to from a high voltage experimenter. In other words, this is a set of plans for a working Tesla coil written by someone who has done it. It works. And you'll find a photo of the coil on the cover.

This coil uses a primary of 8 gauge wire driven by a Model-T hum coil which can be purchased from some auto supply houses (suggested sources provided.) The primary consists of 34 gauge wire wound around a 16" length of PVC tubing.



I must warn you that the how-to is not extremely detailed, but it's still quite good. Any Tesla coil experimenter would do well to have these plans. This is a home-grown coil and a home-grown publication that you won't find in any bookstore. Look it over carefully. Brief, but fairly priced. Buy a copy and start building. 5 1/2 x 8 1/2 booklet 16 pages

Cat. no. 374

\$4.00

LOUDIN COIL

PLANS & INSTRUCTIONS TO BUILD THE HIGH FREQUENCY ELECTRIC COIL

by John F. Nuyen

This is actually a Loudin coil (very similar to the Tesla coil) that like the coil above is driven by a Model-T hum coil and an 8 gauge primary. The secondary is wound with 34 gauge magnet wire around paper tubes.

You'll find this is brief, typewritten, and not "slick" in appearance, but is written by someone who has done it. If you're into Tesla coils, you should have this. Order a copy. 5 1/2 x 8 1/2 booklet 16 pages

Cat. no. 375

\$4.00

JACOB'S LADDER

PLANS & INSTRUCTIONS TO BUILD THE TRAVELING ELECTRIC ARC (JACOB'S LADDER)

by John F. Nuyen

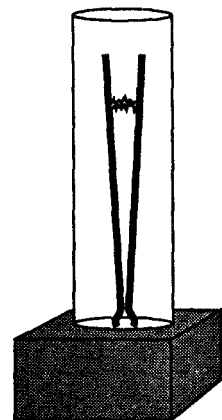
You've seen them — those two wires sticking up in the air in a "V" shape with a spark that starts at the bottom and slowly travels upward. You've seen them in the "mad scientist" movies.

The ladder is easy to build and quickly goes together. It makes an impressive science fair project, although I'm not sure exactly what scientific use there is for it. Maybe you can use it to terrify your neighbors.

Another typewritten booklet by someone who has done it. Get a copy — for your reference library, if nothing else. 5 1/2 x 8 1/2 booklet 16 pages

Cat. no. 376

\$4.00

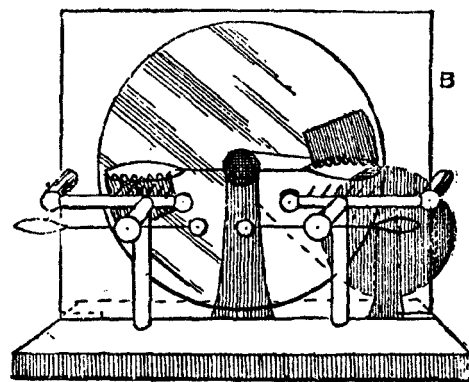


ELECTRICAL INSTRUMENT-MAKING FOR AMATEURS

by S. R. Bottone
reprinted by Lindsay Publications Inc

You can go back a hundred years and build your own equipment and be right at the "cutting edge" of 1888 technology.

You get basic information on materi-



BUILD ELECTRICAL MACHINES!

als, soldering, and working glass. Then you build pith ball and gold leaf electroscopes, a Coulomb torsion balance, and Volta's electrophorus static generator. You'll learn how to take a sheet of glass and cut a circle from it, drill a hole in the center and use it to build Bertsch's high-voltage static generator, Carre's Dielectric machine, a Holtz machine, and a Wimshurst influence machine. Any one of these machines is powerful enough to shock the underwear off Aunt Annabelle!

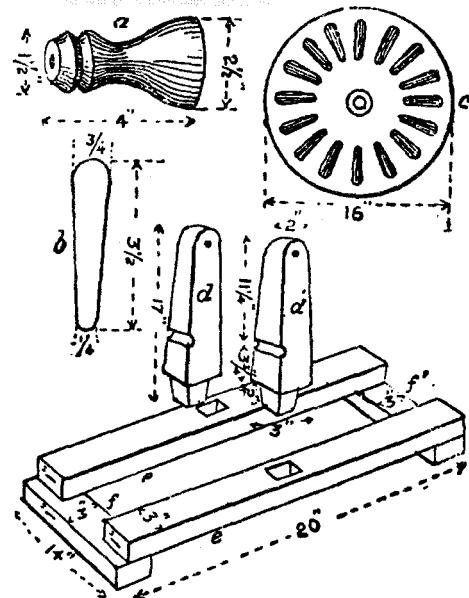
You'll learn how to build a medical coil that produces a 1/2" spark, or a 1" spark induction coil. With a powerful magnet you can make a shocking machine which appears to be little more than a simple magneto. Build a uni-direction current machine (a motor), a dynamo, an ammeter, a voltmeter, a galvanometer, batteries, a single fluid cell, a double fluid cell, and using these two basic battery configurations how to create powerful batteries using chemicals from zinc chloride and sulphuric acid to sal ammoniac and potassium dichromate which are more commonly known as the Daniell, Bunsen, Smee, Walker cells and others. Then you get simple plans so that you can build a working electrical telephone, the newest rage a hundred years ago.

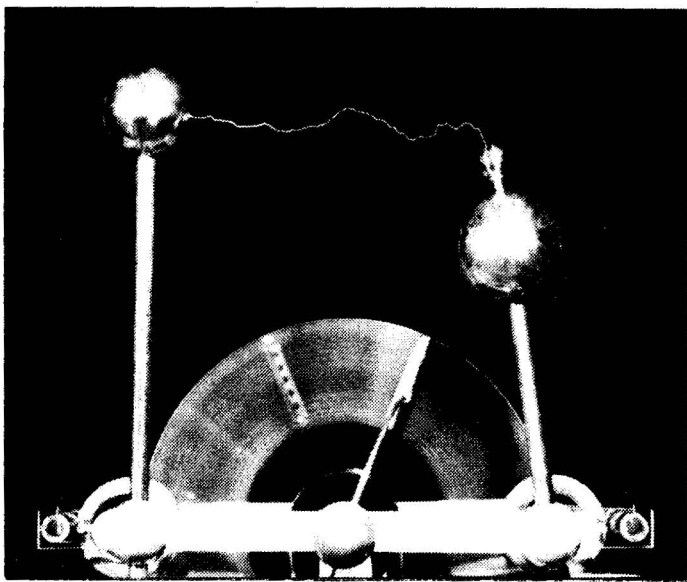
Obviously so many topics are covered in such a small book that the number pages devoted to each topic are necessarily limited. Nevertheless, you get enough useful information to build working equipment. The illustrations are primitive by today's standards but are informative.

Fascinating book! Valuable information! Get a copy. Worth having. 5x7 paperback 183 pages

Cat. no. 4929

\$9.95





Homemade Lightning

**HOMEMADE LIGHTNING –
CREATIVE EXPERIMENTS
IN ELECTRICITY**
by R. A. Ford

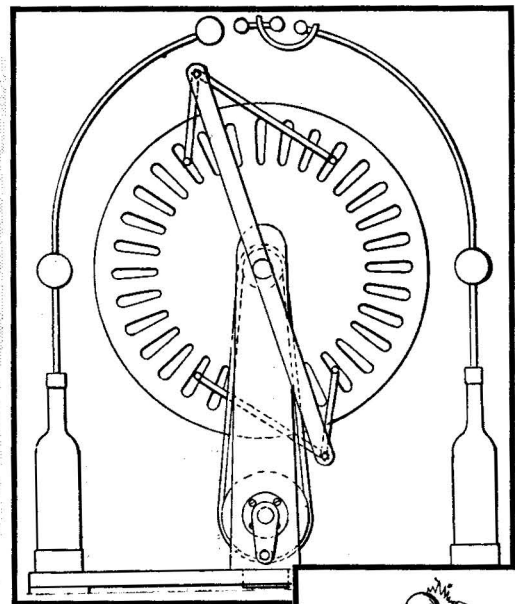
From the back cover:
"The author explains how to build an affordable high-voltage generator and then describes how to use the generator safely to conduct your own electrostatics research. Ford has compiled a fascinating collection of experiments to get you started that reveal the wide-ranging impact of electrostatics on motor design, plant growth, medicine, aerodynamics, gravity, photography, meteorology, and much more."

Probably the best part of the book is Ford's Wimshurst machine – a beautifully built machine capable of producing 10 1/2" sparks. You get brief but adequate instructions, drawings, photographs, hints and tips to get this powerful static generator going.

You also get plans for an electroscope, the Leyden jar condenser, and the electrophorus. Ford describes experiments you can perform such as electrostatic motors, electrohorticulture, cold light, the levitating rocket, and more. You'll also get historical articles on early electrostatic machines, instruments, and more.

This is an excellent book. It has much the same information you'll find in other books in this catalog, but this equipment is built with currently available materials. I think that if you use this book with the rare classical information found in the old reprinted books, you will be on your way into a new world of high-voltage experimentation.

You'll find this book is about electrostatics, that is, static electricity. There is nothing on AC devices such as the Tesla coil. Good book. Order a copy! 7 1/2 x 9 1/2 paperback 198 pages Cat. no. 380 \$14.95



Build a High-Voltage Wimshurst Machine

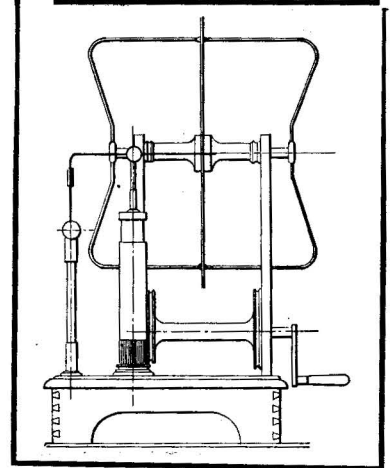
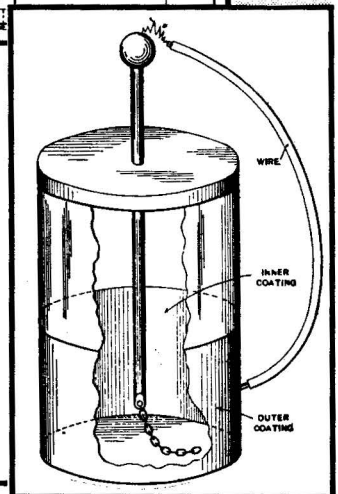
**THE WIMSHURST MACHINE
HOW TO MAKE AND USE IT**
by Alfred W Marshall
reprinted by Lindsay Publications

"A practical handbook on the construction and working of the Wimshurst machine, including radiography and wireless telegraphy, etc., and other static electrical apparatus."

Build yourself a copy of this classic lightning bolt generator. This is no toy! Its 24" plates will knock your socks off – and probably electrocute you if used with Leyden jar accumulators. This is a heavy duty machine.

Chapters include introduction, static electricity, the electrophorus, the electroscope, condensers, the Leyden jar, parts of a Wimshurst machine, making and management of Wimshurst machine, examples of machines, a large Wimshurst machine, a machine for X-Ray work (dangerous), and experiments with machines.

This is a small book loaded with illustrations and wall-to-wall how-to. There are photographs but they are of poor quality. After all, in 1908 not every printer was capable of printing photographs.



This is quite a rare book. You would be hard pressed to find an original copy at any price. But you can have a copy for your library at a reasonable price and use it to build a machine or just to read. Get a copy. Great little book. You'll like it! 4x7 paperback 112 pages Cat. no. 20331

\$8.95

BUILD LIGHTNING BOLT GENERATORS!

SECRETS OF BUILDING ELECTROSTATIC LIGHTNING BOLT GENERATORS

You can generate high voltage with AC transformer devices like the induction coil and Tesla coil, or you can make lightning bolts with electrostatic DC devices like the Van de Graaff generator. Walt Noon, the frenetic electrical experimenter, shows us some of the things he's discovered in his quest for high voltage.

He'll show you and explain the experiments he has run, the problems he has encountered, his solutions to those problems, ways to build low cost lightning bolt generators, ideas that yet need to be explored and much more.

If you're looking for a heavy, theoretical text or a step-by-step construction manual, then this won't cut it for you. BUT! if you want general instructions that will allow you to build high voltage machines out of what you have on hand, and then improve them, you need this.

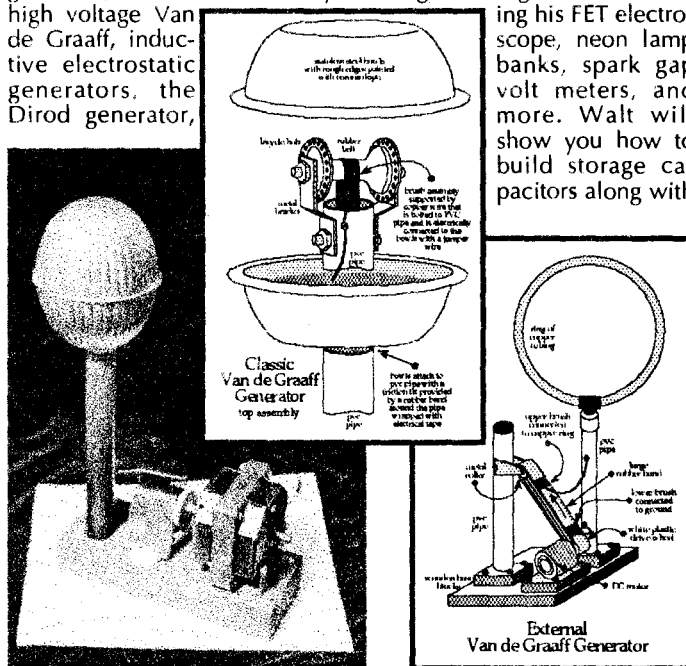
Walt covers the electrophorus, his Rotostatic generator, his bizarre "Cat-o-Static" generator,

**including high voltage test equipment,
experiments, motors and more!**

motor speed controls, external Van de Graaff generators, the classic internal Van de Graaff generator, ideas for an extremely high voltage Van de Graaff, inductive electrostatic generators, the Dirod generator,

and more.

You'll find the equipment Walt has used to measure the voltages he has generated including his FET electro-scope, neon lamp banks, spark gap volt meters, and more. Walt will show you how to build storage capacitors along with



details of his successes and failures.

You get a list of interesting experiments to perform from something as simple as making your hair stand on end to building a "perpetual motion" machine. You'll learn about a variety of ion motors, ion blowers, the Franklin electrostatic motor, the Poggendorff Corona Motor, and even capturing free electrical energy from the atmosphere (Ben Franklin did this, and it almost killed him!) As a bonus Walt will show you how he electroplates metal onto non-conducting forms to build low-loss high voltage terminals!

Walt is not a scientist nor a fantastic author. But he will clearly and humorously explain some of the crazy experiments he's tried and hopes you'll improve on. You get an easy-to-read text loaded with photos and drawings. You'll find that it's really quite easy to get started in electrostatics, and Walt's book will get you going!

Excellent book! Worth having.
Get a copy. 5 1/2 x 8 1/2 paper-
back 91 pages
Cat. no. 20900 \$8.95

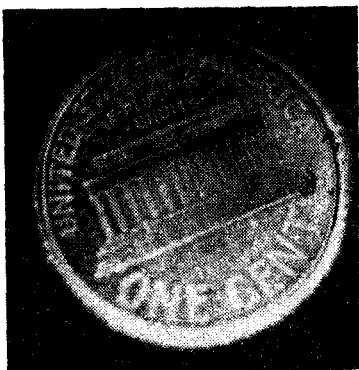
BUILD A 40,000 VOLT INDUCTION COIL

HOW TO BUILD A 40,000 VOLT INDUCTION COIL


by Walt Noon

Are you looking for a fast and simple way to generate high voltage? Then you should build this nifty little device. All of the parts should be available in your area, and depending how much experience you have building electronic equipment, you should be able to bolt it together in a few hours.

As you already know, the ignition coil in your automobile is the modern equivalent of an old time induction coil. It is nothing more than a transformer that converts low voltage into very high voltage. The points in your automobile replace the old fashioned



spark gap. Every time the points open, a pulse of DC current hits the coil like a hammer hits a bell. The ignition coil "rings" like a bell and produces a burst of high voltage. If you "hit" the coil fast enough, the ringing seems to be continuous.



lian photography.

The circuit, based on a 555 timer integrated circuit, provides pulses with adjustable power and frequency. This allows you to easily tune the pulses to the natural resonant frequency of the coil which will significantly increase the output voltage.

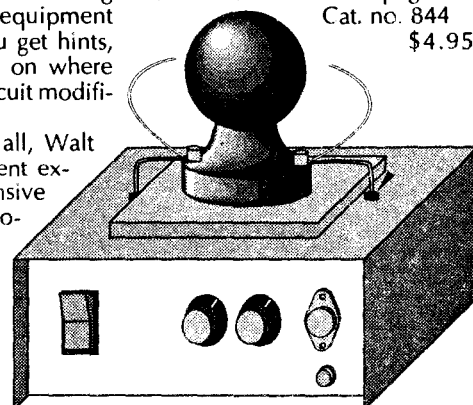
You get drawings of the unit, parts list, circuit diagram, photos and assembly instructions for the coil. You are expected to have at least some experience building modern electronic equipment with perf board. You get hints, tips and suggestions on where and how to make circuit modifications.

Probably best of all, Walt includes eight different experiments plus extensive details on Kirlian photography. He'll show you how to modify an inexpensive 35mm camera to take these unusual photographs in color and black and white. You

also get six Kirlian photographs taken with the equipment he shows you how to build.

If you want to try your hand at high voltage experiments, this might be just the way for you to "cut your teeth", and it's something you'll be proud to show your friends. And it's a good way to literally shock the pants off them! Get a copy of this. It's unusual. It's well written. And it's inexpensive. You'll like it. 5 1/2 x 8 1/2 booklet 24 pages

Cat. no. 844
\$4.95



INDUCTION COILS HOW TO MAKE, USE, AND REPAIR THEM

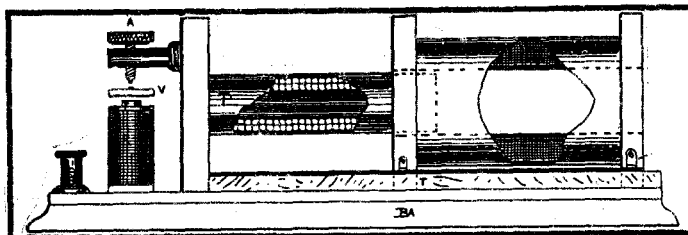
by G. D. Overall, MD
reprinted by

Lindsay Publications Inc

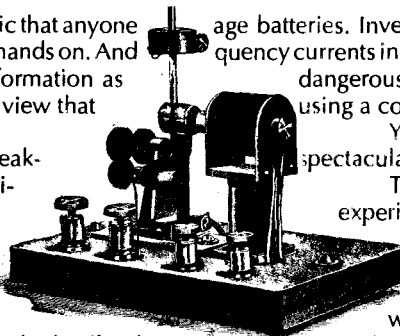
Although this classic work first appeared in 1896, this fourth edition was printed in 1907. And it's just that - a classic. It's not the best book on induction coil construction, or batteries, or wireless telegraphy, or X-Ray or any other high voltage experimentation, because each chapter could be a book in itself. But it is a classic that anyone interested in lightning bolt generators tries to get his hands on. And although Norrie's book covers much the same information as others, you get a different slant, a different point of view that you will find useful.

Chapters include Coil Construction, Contact Breakers, Insulations and Cements, Condensers, Experiments, Spectrum Analysis, Currents in Vacuo, Rotating Effects, Gas Lighting, Batteries for Coils, Storage or Secondary Cell, Tesla and Hertz Effects, the "Roentgen" Rays and Radiography, and Wireless Telegraphy.

You get information, some of it quite unique, on Ruhmkorff coils, oil immersed coils, a disruptive Tesla coil, medical coil with interchangeable secondaries, mercury vibrators, Wehnelt interrupter, adjustable cone vibrator, insulating compounds, Leyden Jar



INDUCTION COILS! *How to Make, Use and Repair Them...*



age batteries. Investigate the "Tesla" effects, the use of high frequency currents in electro-therapy, ways of generating X-Rays (very dangerous), the construction of a very early wireless set using a coherer detector, and much more.

You'll find many illustrations. They aren't all that spectacular but you do get 79 drawings, and 8 tables.

This is a book that should be in every high voltage experimenter's library. It is a classic. If it has any fault, it's that the author has tried to cover too much material in too small a book. Nevertheless, there is much here that you can use. The reprint will cost you less than the cost of an original if you

can find one. Get a copy. You'll like it. 41/ 2 x 6

paperback 288 pages

Cat. no. 20510

\$9.95

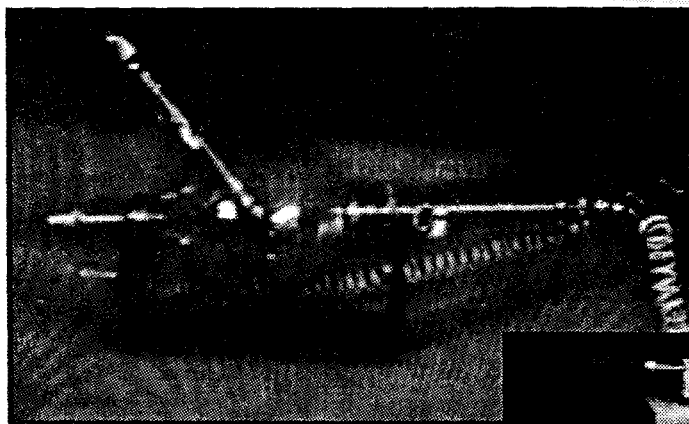
Watch X-Ray & Geissler Tubes! High Voltage!

Great 90 Minute Video!

Next, you'll see Crookes tubes and how they lead to the discovery of X-Rays by Roentgen. You'll see a variety of early X-Ray tubes and learn how they had to be controlled and operated. You'll also see the rare pamphlets Roentgen published announcing his discovery to the scientific world a hundred years ago.

You get a fascinating historical exhibition of early electrical equipment with informative narration. To see early Geissler and X-Ray tubes operate is full color is exciting. You

may want to experiment with Geissler tubes. X-Ray is probably too dangerous. I don't know where else you'll find an experience like this. If you're into high-voltage projects, I think you'll find this very entertaining. Get a copy! 90 minute VHS video tape
Cat. no. 396 \$29.95



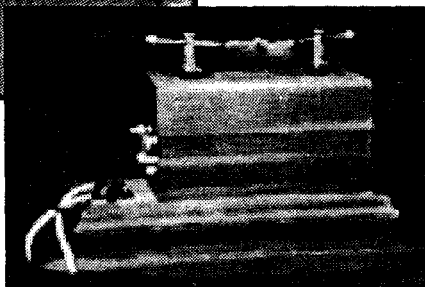
VIDEO - IN QUEST OF THE LIGHT; VISIBLE AND INVISIBLE

by Kruezer
and Hardesty

Tour an amazing collection of early electrical hardware and watch it operate on this fascinating 90 minute videotape.

You'll see electroscopes, pictures of early electrostatic machines and vacuum pumps, early batteries and galvanometers. You can watch as each of several early induction coils come to life throwing big sparks. See an early device used by physicians to measure the voltage of their high-voltage electrical machine before turning it on their patients.

Then watch colorful Geissler tubes (related to neon tubes of today) come to life when they're connected to an induction coil. Watch the amazing paddle wheel or railway tube operate when hit with an electron beam.



CONSTRUCTION OF LARGE INDUCTION COILS

THE CONSTRUCTION OF LARGE INDUCTION COILS

A Workshop Manual

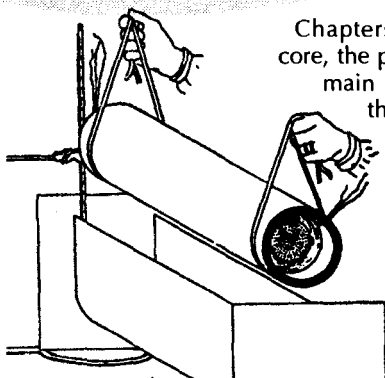
by A. T. Hare

reprinted by Lindsay Publications

Induction coils often don't get their fair shake among the high voltage equipment builders. Tesla coils are the rage. They can generate far greater voltage, but not much power. A well-built induction coil can knock your socks off with voltage and deliver power to boot.

Tesla coils are essentially air-core, high-frequency, resonant transformers. Induction coils are iron core transformers that run at a lower frequency with little thought being given to resonance. But they sure do work! They've been firing automotive spark plugs for decades.

You can build a big coil! One with a core 18" long that is almost 1 3/4" in diameter and weighs almost eight pounds. The secondary is made up of over 79,000 turns of very fine wire weighing 19 pounds and being almost 17 miles in length! This is the kind of machine you see illustrated in those bizarre turn-of-the-century medical texts!



Chapters include: the core, the primary coil, the main insulating tube, the condenser, the commutator, the break, the secondary coil, the winding, mounting the discs, outer insulation, covering and finish-

ing, hand breaks, electrolytic breaks and more.

You get 35 drawings showing everything from the general layout of components to the procedure of applying insulation to the main tube. You'll learn how to build the capacitor and how to treat it to increase its capacity. You'll learn how to build and adjust the break (the vibrating contacts that drive the primary). You'll see how to build a unique machine to coat

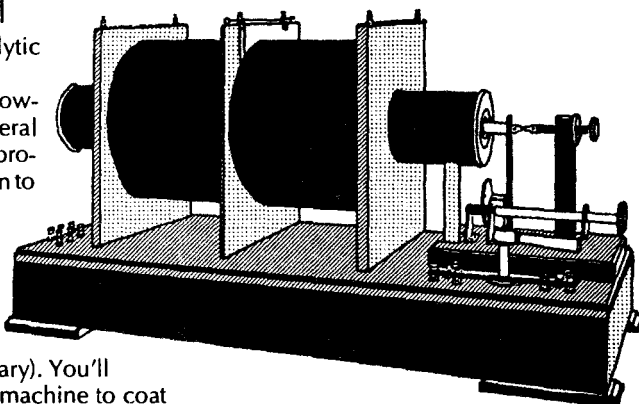
wire with paraffin to improve its insulating qualities. And more!

Even if you don't intend to build something quite this big (or quite this small) this is still a book worth having. The lessons taught here can be applied to other projects. This is great 1900 how-to!

If you build this monster and fire it up, just let me know so that I don't call the fire department by mistake! And if you try to hook it up to an X-Ray tube, I'm leaving the country! Excellent book. Rare how-to! A "must have" for all apprentice mad scientists. Build one of these machines, and scare the hell out of everyone! 5 1/2 x 8 1/2 paperback 155 pages

Cat. no. 20897

\$9.95



DESIGN & CONSTRUCTION OF INDUCTION COILS

THE DESIGN & CONSTRUCTION OF INDUCTION COILS

by A. Frederick Collins

Inside the cover of this 1908 classic is the author's statement:

"The present work treats of eight different sizes of coils, varying from one giving 1/2-inch sparks to a large one giving 12-inch sparks. These various sized coils are included in three specific designs, and I have tried to tell in easily comprehensible language each process in sequence, together with the dimensions of each part down to the smallest screw...."

Here you get one of the best books I've ever seen on coil construction.

Twenty chapters delve into the theory of the coil and the action of each of its components, design of spark coil cores, choosing interrupters, details of condenser design and size, and more. Wire is discussed along with its cutting, straightening, annealing, the making of the paper tube, bundling and taping wires for large cores, and more.

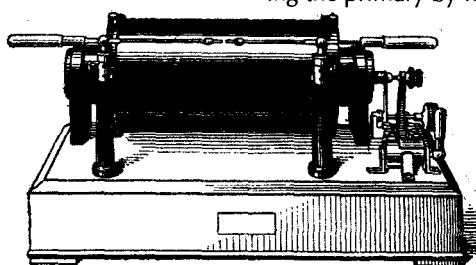
Detailed discussions reveal the advantages of silk versus cotton-covered magnet wire, mounting the spool in the lathe, winding the primary, making a winding jig, winding the primary by hand, insulating the primary, the intricacies of winding the high-voltage secondary including details of a special winding machine, the impregnation of insulation waxes, the winding of helical secondaries, construction of

per condensers, adjustable mica condensers, reversing switches, and much more. You get wiring diagrams for various coils, final assembly details, sources of direct current including dry cells, plunge batteries, chloride accumulators, and more.

This is a really a great book. You get more useful data in one place on building coils than you'll usually find in a dozen other books. Tesla coils are fun and fascinating, but so is the induction coil. Build one. Experiment. Have fun. Show your friends. Brag about it. Get a copy of this! Highly recommended! 5 1/2 x 8 1/2 paperback 272 pages - well illustrated

Cat. no. 20404

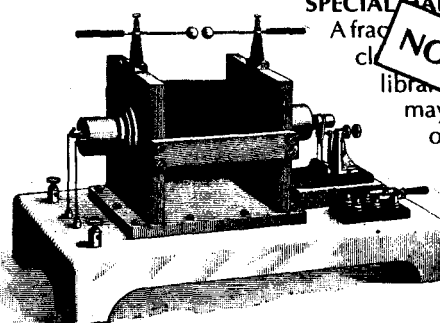
\$12.95



aperture insulating rings, and more.

You'll learn how to dip the coil and bake it, build a vacuum apparatus to impregnate the apparatus, to dry the insulation, machine the parts for a simple spring interrupter, assemble the parts, mount the finished device, and more.

You'll learn about making tinfoil and pa-



SPECIAL HARDCOVER EDITION

A fraction of the print run has been set aside for collectors and libraries. This edition may from time to time be out of stock for periods of time.

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\$19.95

NOT AVAILABLE

PRIMARY BATTERIES

by Henry S. Carhart

reprinted by

Lindsay Publications

Here's a great little book that covers the characteristics, construction, performance, maintenance, and measurements of primary batteries — batteries that turn chemicals into electricity.

This is not really how-to. What you get is what I call "practical theory" — knowledge that will help you under-



ments on the polarization of a simple cell, defects of the Daniell cell, the bichromate battery, the copper-oxide battery, the closed Leclanche cell, the Smee cell, the Law battery, the Gassner dry battery, Lord Rayleigh's form of the Clark element, Minchin's seleno-aluminum cell, Jablochhoff's battery, test of a silver chloride cell, grouping dissimilar cells, application of the Bunsen cell, and much more.

Rediscover Forgotten Secrets of PRIMARY BATTERIES

stand turn-of-the-century batteries that few people have ever seen and get the most from them.

Chapters include introduction, simple voltaic cell, potential and electromotive force, closed circuit batteries, open circuit batteries, batteries without a depolarizer, standards of electromotive force, miscellaneous batteries, battery tests, grouping of cells, and thermal relations.

The chapters are actually broken into 118 sections such as experi-



This hard-to-find information is essential for understanding how unusual, early batteries now long forgotten work. Brief construction notes will be found in early radio literature, but little else. This book is the "else".

Great reference! Great illustrations! Impress your friends when you fire up your homemade regenerative receiver on a homemade battery!

They'll think you're Tesla himself! Worth having. Order a copy!

5x7 paperback 208 pages

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Because of the enormous expense of printing and mailing catalogs, we are forced to mail catalogs to only those people who are interested in receiving them. The best and only sure-fire way you can be assured of getting future catalogs is to order books. And that make sense. If you can't find at least ONE book in this catalog that interests you enough to order, then there's little reason to continue sending catalogs. So order today and we'll send catalogs!

We attempt to keep all books on hand at all times.

But it doesn't always work out that way. Sometimes a magazine article or mention on a radio talk-show produces a deluge of orders, or a large book store wants hundreds of copies. We can run out unexpectedly.

Some of the books you see offered are published by small publishers literally operating out of their garages. All too often when I list a book in my catalog, it produces more sales than that small publisher has ever seen. He runs out. You and I wait for him to print more copies. It happens — too often.

When that happens, we put you on the backorder list, and send the book just as soon as it arrives. You always have the option to cancel the backorder, or do whatever you want to settle the account if you choose not to wait. Just let us know.

Elements of MAGNETISM & ELECTRICITY

ELEMENTS OF MAGNETISM AND ELECTRICITY

by John Angell

reprinted by Lindsay Publications

Queen Victoria was very much alive and kicking (and she did a lot of kicking!) when this 1891 science text hit British schools. It had apparently been in print in various editions since 1867.

It's a great book because it presents "practical instructions for the performance of experiments, and the construction of cheap apparatus." And half the book, which is so beautifully illustrated, covers static electricity equipment.

Chapters include natural magnets or lodestones, artificial magnets, terrestrial magnets, history of frictional electricity, electroscopes and electrometers, electrical induction, frictional electrical machines, distribution and tension of electricity, the Leyden jar, and experiments. The last two chapters deal with voltaic or current electricity and its use in electroplating, the telegraph, induced currents, magneto-electricity and thermo-electricity.

Sure, you'll find a lot of

this stuff in other textbooks of the era, but the illustrations here are great and the equipment seems to be somewhat different from the varieties I usually see illustrated.

Build yourself a high-voltage machine, charge up Epinus's condenser, and use the charge to create electrical hail inside a bell jar, or take an electrical portrait. Try Faraday's ice pail experiment. Or build equipment that will make your back bedroom look like Frankenstein's laboratory! Who knows? You might even get arrested for impersonating a mad scientist... or a politician. I can't tell the two apart...

A great little book loaded with hard-to-find information. Fun reading. Great ideas for static electricity fanatics. And that means you,

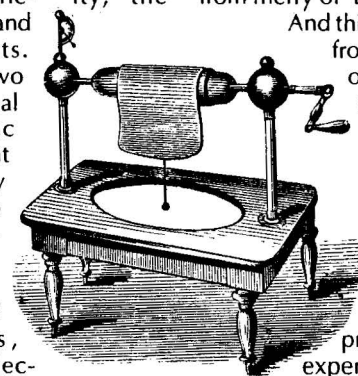
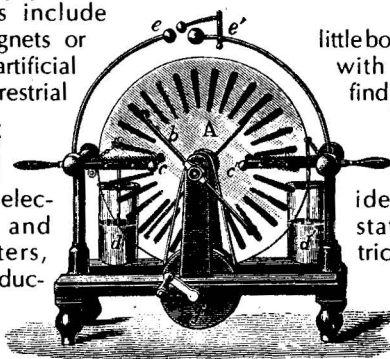
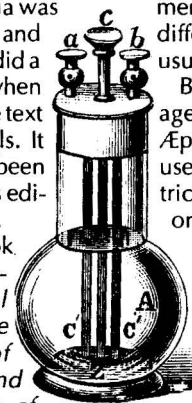
son. Get a copy. A goody from merry ol' England. Oh!

And this copy came from the "Methodist Sunday School Library" on Exmouth Street. So you know Queen Victoria would approve of your experiments. Order a copy, and get started!

4x7 paperback 264 pages

Cat. no. 20862

\$8.95



Classic 1884

Deschanel's STATIC ELECTRICITY

Physics Text!

**DESCHANEL'S
STATIC ELECTRICITY**

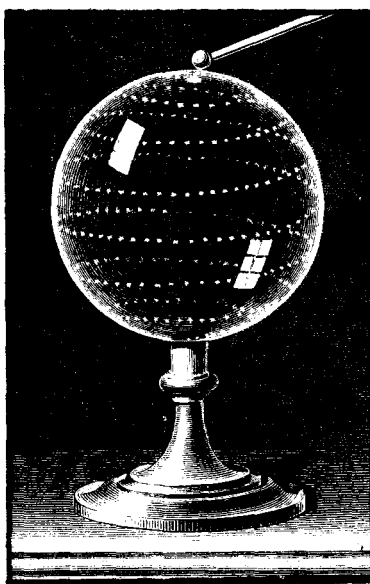
by A. Privat Deschanel

reprinted by Lindsay Publications Inc

In 1884 Deschanel's "Elementary Treatise on Natural Philosophy" (what we now called physics) was translated from the French and published in the U.S. as a series of four volumes. Here you get just those chapters dealing with static electricity.

You get introductory phenomena, electrical induction, measurement of electrical forces, electrical machines, various experiments, electrical potential and lines of force, electrical condensers, effects produced by discharge of condensers, electrometers, and atmospheric electricity.

You'll find many of the same devices described and illustrated in other books, but these are a bit different. You'll see Nairne's machine, an unusual variety of Winter's machine, Armstrong's Hydro-electric machine, Holtz's machine, and Bertsch's machine. Just a few of other experiments shown and described are discharge in Torricellian vacuum, the electric egg, the spangled globe, the electric



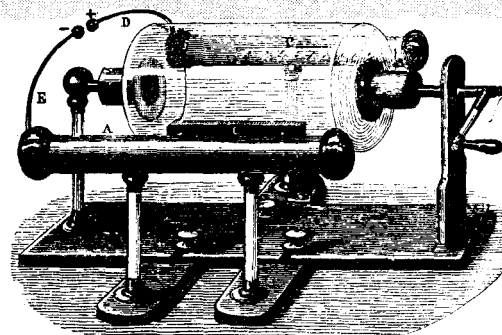
mortar, Leyden jars, the condenser of Aepinus, and the condensing electroscope. You'll see rare and unusual views of the complex portable electrometer, the quadrant electrometer, and many others.

This is a detailed textbook with really great illustrations, excellent text, and even math to back up the theory. Yes, much of this information is available in other books, but this one of the best dissertations I've seen anywhere. And you're sure to get many new ideas. Every static electricity experiment, at the very least, should have a copy for reference. You'll like it. Get a copy! 5 1/2 x 8 1/2 paperback 112 pages

Cat. no. 20722

\$7.95

Electrical Machines



SILLIMAN'S ELECTRICAL MACHINES

reprinted by Lindsay Publications

If you'd like to build a powerful lightning bolt generator, this a publication you should study for ideas. You get beautifully illustrated pages from Benjamin Silliman's book entitled Principles of Physics or Natural Philosophy published in 1865.

Learn about electrophorus, the cylinder electrical machine, Ramsden's plate machine, the American plate machine, Ritchie's double plate machine, the Tylerian machine, care & management of machines, electricity from steam, and other sources of electrical excitement. Discover seven simple but entertaining experiments. Then investigate equipment to store electricity such as the Aepinus condenser, Volta's condensing electroscope, Dr. Hare's single gold leaf electrometer, the Leyden jar, Leyden jar batteries, the spark, Kinnersley's thermometer, electrical discharge in a vacuum, the diamond jar, scintillating tube and magic squares, chemical experiments, Volta's lamp and more.

This is another collection of rare static electricity information that is no longer found in modern physics textbooks. And wood cut illustrations like these haven't been produced in decades. Get a copy of this. It will make an excellent addition to your reference library. 5 1/2 x 8 1/2 booklet 24 pages

Cat. no. 840

\$3.25

Electrocute Your Hemorrhoids!

PRACTICAL ELECTRICITY IN MEDICINE AND SURGERY

by G.W. Overall, MD

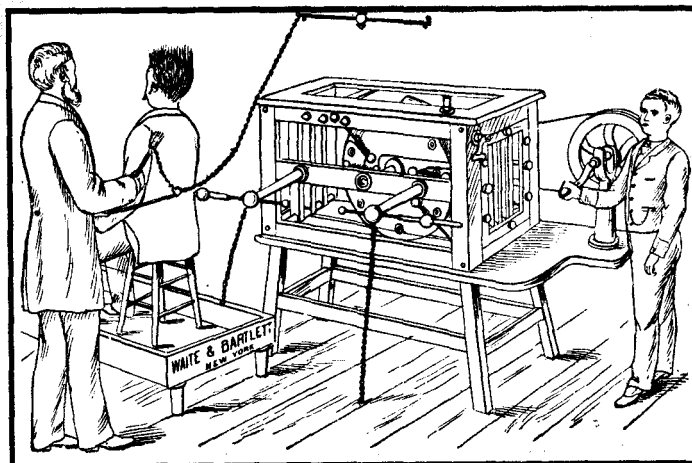
reprinted by Lindsay Publications

I'm not sure I can believe what I read in this book. Overall wants you to believe that electricity can cure everything from lead poisoning to constipation. (Of course, over the years I have gotten the !!!! shocked out of me more than once.)

If you believe in electro-therapy, that's your business. I don't. But I do like this as an early handbook on electrical machines, the excitement they caused, and the hopes that people had that electricity would solve the world's ills, if not their own.

You'll find this to be a reprint of the rare first 1890 edition published in Memphis TN. It's broken into four parts which contain chapters covering the galvanic cell, galvanic current, Faradic current, the effect of these currents, electro-diagnosis, modes of application, the electric cabinet vapor bath, the electric tub bath, treatment of special diseases of the brain, paralysis, rheumatism, chorea, and so on. Part four covers electrolysis, organic diseases of women, electrocautery, batteries, electrodes, and so on.

What I particularly like are the first few pages that describe and show static machines and their use, as well as galvanic battery machines, and so on. Later in the book are unusual medical electrodes that look like something out of a Frankenstein movie. Again, I don't believe the info in the back half of book. In fact, it might be downright dangerous. But this IS a rare book that gives you a

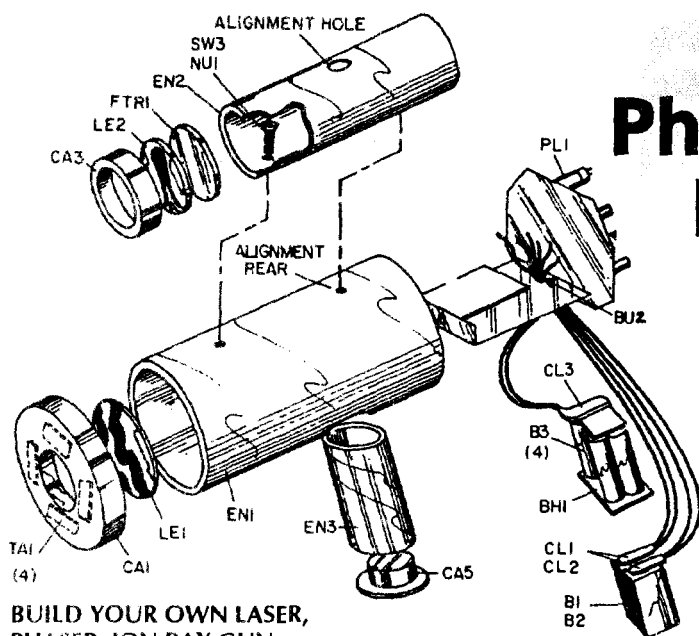


glimpse into early ideas about electricity and its use in medicine.

Consider this book carefully. I think it's unusual, and worth having. (After all, [don't go to the expense and trouble of reprinting books that I feel are NOT worth having. — I may be crazy, but not stupid! Yes, I know. People would debate that too.] Maybe I can use this as a guide to build equipment to deal with my loonie in-laws. Maybe you can, too. Rare, interesting book. Order a copy. 5 1/2 x 8 1/2 paperback 136 pages

Cat. no. 20595

\$7.95



BUILD YOUR OWN LASER, PHASER, ION RAY GUN...

by Robert E. Lannini

Here's one of the most bizarre collections of how-to plans I have ever seen.

You'll learn how to build high-power pulsed red ruby laser gun, high-power continuous IR CO₂ Laser, ultrasonic field generator, programmable high-power ultrasonic generator, 250,000 volt Tesla coil, magnetic field distortion detector, solid-state Tesla coil, a variety of wireless "bugs", a super-sensitive parabolic microphone, electronic paralyzing device, battery charger and eliminator and much more.

Lannini is an experienced electronics inventor, and holds many patents. He'll give you parts lists, wiring diagrams, assembly diagrams and all you need to get these projects built. I don't think that it's any coincidence that almost every plan has a footnote telling you that kits are available from Information Unlimited, Inc., which is owned by the author and which advertises in the back of the science and mechanics magazines. No doubt, that firm's best selling plans have been reprinted in this single volume.

Lasers! Phasers! Ion Ray Guns!

- beginner's simulated laser
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- pulsed laser rifle
- ruby laser gun
- CO₂ laser
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- ultrasonic listening device
- 250 kv Tesla Coil
- Ion ray gun
- magnetic field distortion detector
- light-beam communicator
- solid-state Tesla coil
- infrared viewer
- FM voice transmitter
- long-range telephone xmtr
- parabolic microphone
- paralyzing device
- wireless repeater xmtr
- much, much more!

This book is expensive, but it delivers. I really like this, and I'm sure you will too. Order a copy, even if it has to sit for two years on the shelf before you get ready to build. Excellent book. 8 x 9 1/2 paperback 390 pages.

Cat. No. 346 \$17.95

THE BELL JAR Vacuum Technique & Related Topics for the Amateur Investigator

Steve Hansen offers a newsletter for high vacuum technique, and it looks quite interesting. Typically you get discussions on vacuum basics, conversion of refrigeration compressors to vacuum pumps, sources of supply and more. Every issue I've seen offers interesting projects, hints and tips. Initial subscription price was \$15 US for four issues. If you're interested, write him—

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by Robert E. Lannini

From the back cover:

"Here, you'll find plans for such fascinating devices as a high sensitivity laser light detector... a high voltage laboratory generator that's useful in all sorts of laser, plasma ion, and particle applications as well as for lightning displays and special effects... a solid-state gallium arsenide injection laser system capable of producing 4- to 30-watt peak power infrared pulses at 200 to 2500 pulses per second... an infrared viewer that has functions ranging from nighttime surveillance to viewing IR laser beams..."

"Robert Lannini is an electrical engineer and inventor. He holds numerous patents on such products as electronic and ultrasonic insect and pest control devices, stay-awake devices for drivers, and other high technology devices..."

You get fourteen different projects, twelve of them being laser devices. But even chapter fourteen oughta fire ya up! He'll show you

SPACE AGE PROJECTS

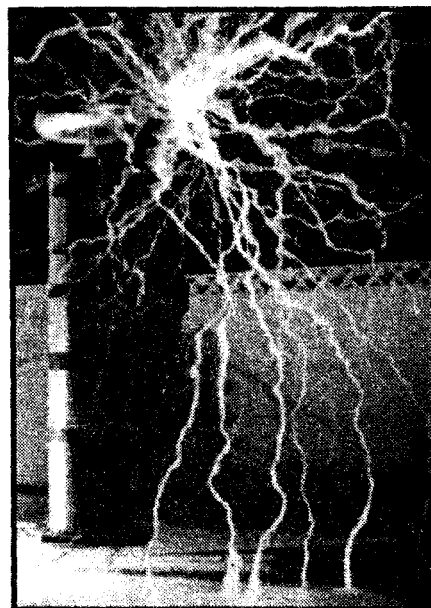
how to build a DC power supply capable of delivering microamps of current at voltages adjustable from 35,000 to 250,000 volts! This is not a Tesla coil. This is similar to the high voltage supply in a TV set with a voltage multiplier attached. The voltages produced are so high that generation of X-Rays becomes a very real danger when using this machine. You have to be careful.

You get schematics, diagrams, step-by-step how-to, safety precautions and more. Unusual how-to, to say the least!

Imagine! The next time you catch raccoon digging through your garbage cans, you can nail them with a laser! Fry the roaches under the kitchen sink! Clobber that snake the comes slithering out of the toilet bowl and scares the hell out of your mother-in-law. (On the other hand, let the snake be. He's too much fun...)

Get a copy of this, build yourself a laser and a lightning bolt generator. Strange, hi-tech stuff. Go for it! 7 1/2 x 9 paperback 262 pages Cat. no. 393 \$17.95

*Zap 'em
with lasers*

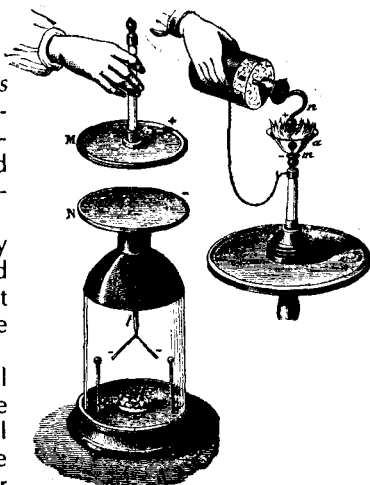


**WILLIAM PECK'S
ELECTRICAL RECREATIONS**
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Go back to 1860 and discover static electricity experiments designed to inform and entertain students studying physics in schools and academies.

If you've collected other early static electricity works, you'll find some of this to be old hat. But other parts will be new and quite interesting.

Learn about the electrical chime, an electrified puppet, the electrical wheel, the electrical egg, the electrical square, the electrical cannon, the condenser of Epinus, using the condenser,



William Peck's 1860

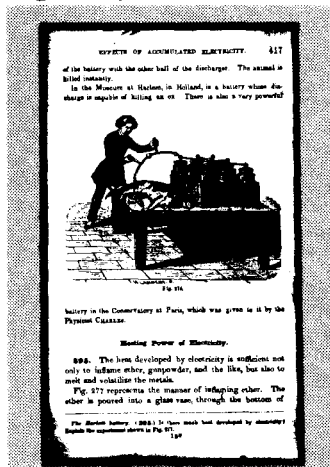
ELECTRICAL RECREATIONS

Unusual High Voltage Experiments

slow and fast discharge of the condenser, the Leyden jar, a battery of Leyden jars, the condensing electrometer, electrocution of dogs!, heating power of electricity, and the mechanical effects of electricity.

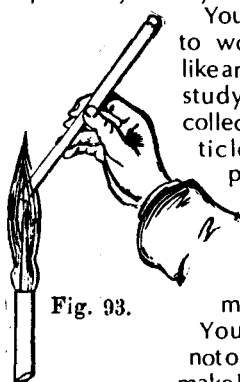
You'll find fascinating old time wood cuts illustrating almost every article. If static electricity is your field, you'll want to add this low-cost booklet to your reference library. Very interesting and very unusual. Get a copy. 5 1/2 x 8 1/2 booklet 24 pages

Cat. no. 839 \$3.25



**GLASS WORKING
BY HEAT AND BY ABRASION**
*edited by Paul N. Hasluck
reprinted by Lindsay Publications*

You can learn to work glass like an expert by studying this collection of articles reprinted from the pages of "Work" magazine. You'll learn not only how to make laboratory



apparatus, but how to grind telescope mirrors and lenses.

Chapters include: appliances used in glass blowing; manipulating glass tubing; blowing bulbs and flasks; joining tubes to bulbs; making thistle funnels; blowing and etching fancy glass articles; gilding and embossing sheet glass; handworking of telescope specula, turning, chipping and grinding glass; and the manufacture of glass.

The information on making glass and grinding lenses is too brief, but the working of glass

J. H. Pepper's STATIC ELECTRICITY!

STATIC ELECTRICITY

by J. H. Pepper

reprinted by Lindsay Publications

Back in the 1880's when people knew little about current electricity, static or frictional electricity was a scientific curiosity in laboratories and parlours. Giant lightning generators were built by amateurs and educators and bizarre experiments performed.

From Pepper's "Cyclopaedic Science Simplified" we've reprinted the chapter entitled "Electricity, Frictional or Static", one of the best textbook discussions we've found yet.

You get a detailed discussion of electroscopes, 17 electroscope experiments, Cavallo's Cylinder Electrical Machine, the Royal Polytechnic Great Plate machine, Winter's electrical machine, the Holtz machine, the Electric Well experiment, experiments in induction, charge storage techniques, lengthy discussion of Leyden jars, the Leyden battery, followed by another thirty experiments including Cuthbertson's Balance Electrometer, the elec-

Dozens of Unusual Experiments!

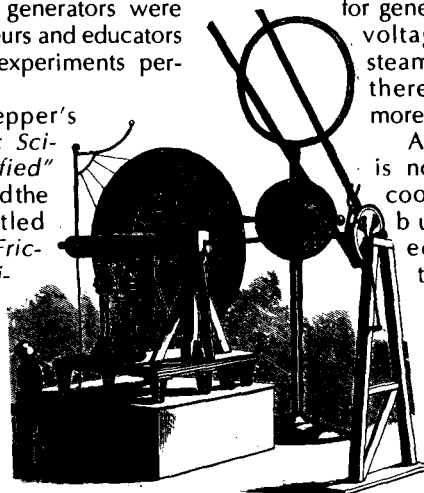
tric bomb, Harris's thundercloud needle, and a couple of machines for generating high voltage with a steam jet! And there is much more.

Although this is not really a cookbook for building equipment, the wood engravings are quite detailed, and the text describes the equipment thoroughly

enough that you could probably build the devices without great trouble. This is a great source for unusual science fair projects.

If you like to explore old scientific principles, build unusual apparatus, or just impress your friends, consider a copy of this unusual book. I think you'll like it.

5 1/2 x 8 1/2 paperback 88 pages
Cat. no. 4783 \$5.95

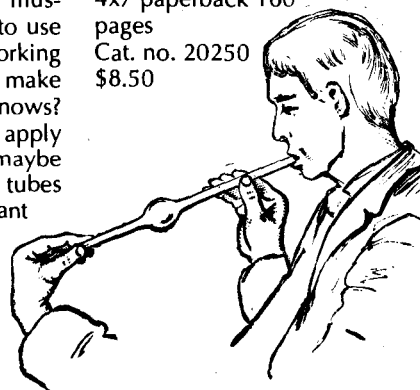


GLASS WORKING

tubing into useful laboratory objects is detailed and well illustrated. You may be able to use this info to get a feel for working glass that will allow you to make fancy art objects, who knows? You might even be able to apply this to neon signs and maybe even electronic vacuum tubes and x-ray tubes, if you want to be really exotic.

Don't get me wrong. I'm sure this is not the greatest book on working glass I've ever seen, but it is the best I've seen so far

and is well-illustrated. Originally published in England. This American edition was published in Philadelphia in 1903. Get a copy. 4x7 paperback 160 pages
Cat. no. 20250 \$8.50



EXPLORE MYSTERIES OF LIGHTNING!

ALL ABOUT LIGHTNING

by Martin A Uman

You'll enjoy this great easy-to-read, highly entertaining book on lightning and its dirty work. From the back cover:

"Does lightning strike twice in the same place? How does a lightning rod work? What is ball lightning? How many thunderstorms are in progress in the world at any one time? Why does lightning zigzag? What is St. Elmo's Fire?"

These and many more often-asked questions about lightning are answered in this fascinating and informative guide for the layman, presented in an easy-to-follow question-and-answer format. One of nature's most awesome phenomena, lightning has

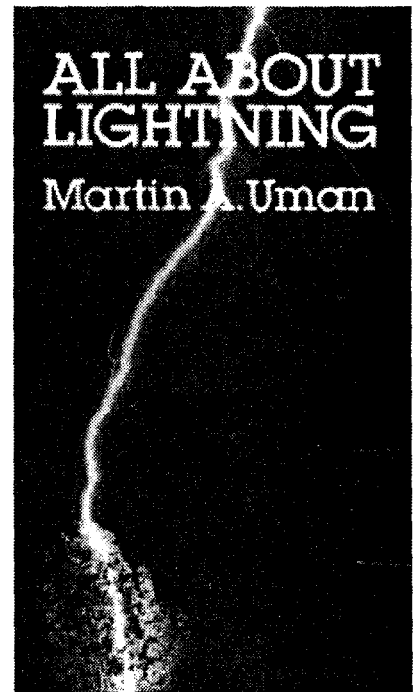
intrigued man since earliest times. In this book, a noted scientist and expert on lightning dispels many misconceptions while offering a wealth of scientific and technical information about the nature of lightning and its effects.

You'll discover how Benjamin Franklin proved that lightning was electrical, how to protect yourself from lightning, how to photograph lightning (it's not difficult), the possible relationship between ball lightning and UFOs, what to do for a person struck by lightning, the nature of sheet lightning, ribbon lightning, bead lightning and other variations, and much more. While the overall approach is nontechnical, Dr. Uman has incorporated scientific data in the answers in such a

way that laymen will find the book a near-painless introduction to current scientific knowledge about lightning.

Simple, well-drawn diagrams illuminate the text, along with a selection of spectacular lightning photographs, including a remarkable image of 5 lightning bolts produced by the explosion of the first thermonuclear device. In addition, each chapter contains a list of references cited in the text which suggest further reading for anyone interested in finding out more about earth's dazzling atmospheric fireworks."

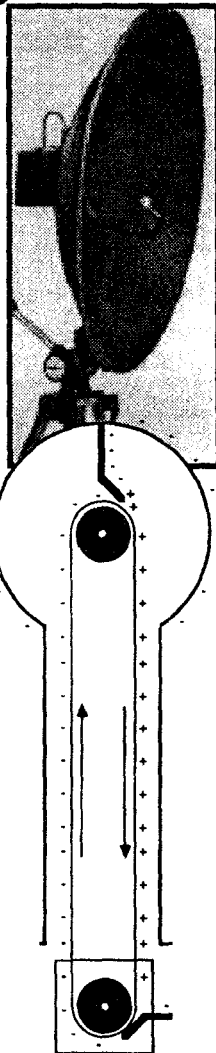
Fascinating book. Get a copy! 5 1/2 x 8 1/2 paperback 192 pages
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GADGETEER'S GOLDMINE!

by Gordon McComb

Here, in a single book, are 55 off-the-wall devices you can build.

You get a Jacob's ladder, plasma sphere generator, induction coil, Van de Graaff generator, Tesla coil, Kirlian camera, piezo film speaker and amp, He-Ne laser pistol, variable-rate strobe light, radiation detector, universal receiver, superconductor disc, see-in-the-dark viewer, shape-memory alloy, espionage devices, robots, and more!

And this is good stuff! — plenty of detail: illustrations, diagrams, how-to text. The list of suppliers is quite impressive, too. This is a book every unorthodox experimenter should have in his library and never loan. Get one! 7 1/2 x 9 paperback 406 pages
Cat. no. 383 \$19.95

Advanced Lightning Text Great Reference!

LIGHTNING

by Martin A Uman

Whether you are interested in nature's fantastic electrical displays, or trying to find a way to generate bigger lightning bolts of your own, you'll find this technical investigation delivers more hard-to-find information than a dozen other books put together.

From the back cover:

"This book is simply indispensable to the serious student of lightning.

Written at the level of an advanced undergraduate in physics or engineering, the book's remarkable clarity and minimum of mathematical notation make it accessible to the nonspecialist and of great use as a teaching resource or for self study. Dr. Uman, whose own work has contributed greatly to understanding the physics of lightning, has divided the book into seven chapters. Chapters 1-4 present a general introduction to lightning phenomena and terminology, lightning photography, electrical and magnetic field measurements and current measurements. Chapters 5-6 discuss lightning spectroscopy and thunder (often neglected by other authors) and present a wealth of new and detailed analyses of the latest data. Chapter 7 clearly reviews existing theories regarding the discharge process from the special vantage point of a scientist well-versed in plasma physics.

Professor Uman's descriptions of the work of other scientists are exceptionally accurate and each chapter includes extensive references to work in the field, resulting in a comprehensive and detailed bibliography of pertinent publications. Four appendices bring recent research up-to-date and cover such phenomena as bead and ball lightning. A fifth appendix, added especially for this edition, reviews experimental data and modeling. The book is further enhanced by comprehensive and easy-to-use indices to subjects and authors."

Solid book with more information than you'll probably need. Great reference. Get one. 5 1/2 x 8 1/2 paperback 320 pages
Cat. no. 5002 \$8.95

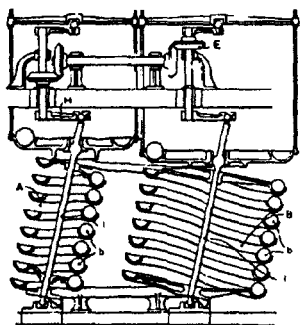
PERPETUAL MOTION MYSTERY

THE PERPETUAL MOTION MYSTERY

by R. A. Ford

Perpetual motion. Some people laugh at it. Others take it very seriously. Here's a serious look at these unusual systems.

First, you get a reprint of the small and now-rare "Perpetual Motion Handbook



Through Entropy Reversal" published in 1967 by I. R. Barrows. Then, you get his first (and last) four "Perpetual Motion Journals" published about the same time. Each is small but filled with

letters patents, ideas, illustrations, and thought-provoking suggestions.

The author jumps into a discussion of why perpetual motion might be possible, pointing out unusual theories from the past, and pointing out possible defects in current theories.

Covered are kinetic gravitational theories of the 18th century, DesCarte's Vortex Theory, LeSage's Impact Theory of Gravity, and Brush's Wave Theory. Attempts at experimental confirmation of these theories are then provided.

Natural gravitational anomalies such as solar eclipse, bulging river surfaces, bore at sea, unusual rock movements, slowly falling hail are revealed. You'll learn about Robert Cook's inertial propulsion device and its relation to Newton's Law.

The last large section covers the Orffyreus wheel built in Germany centuries ago. The author believes it might have been the only real perpetual motion machine yet invented, the secret of which was lost. You'll learn about the inventor's life, his education, his wheels, his successes and failures, the tests, and more.

Last, the author, based on the material presented in earlier chapters suggests how a perpetual motion machine might be built.

You get a collection of strange, rarely seen stories and phenomena that might hold the key to perpetual motion, if, indeed, such a machine can be built.

This is not a construction manual, nor is it extremely complex. It's a notebook gathered over the years, one that should be interesting to believers and non-believers.

Consider it. You won't find anything quite like it on the market. Different. Unusual. Interesting reading. Get a copy.

5 1/2 x 8 1/2 paperback 196 pages

Cat. no. 4538

\$9.95

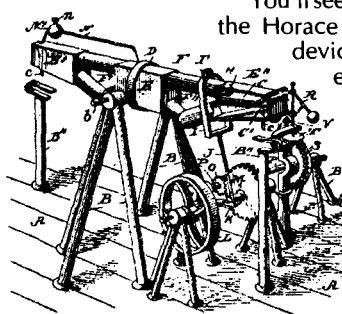
50 PERPETUAL MOTION MACHINES

FIFTY PERPETUAL MOTION MECHANISMS

by Fred Dieterich

reprinted by Lindsay Publications

The author was a patent attorney who wrote a book in 1899 entitled "The Inventors Universal Educator" covering the process of securing a patent. One short section of his book covers perpetual motion inventions which are unpatentable. Dieterich, who was outraged by claims of perpetual motion, presents drawings of 50 different mechanisms.



No doubt, you've already seen a number of these, but others are unique, and all are interesting.

You'll see the Marquis of Worcester wheel, the Horace Wickham machine, the 1868 device of Dr. Drasch of Austria, an electric device, the self-moving railway, the Orffyreus 1720 wheel, a complicated water screw, and others.

If you're into PM, you'll want to add this to your collection. Maybe you're trying to build a machine and want to avoid previous failures. Or you're a skeptic and want a good laugh. Whatever, the material is interesting and the price is low. Get a copy. You'll like it. 8 1/2 x 5 1/2 booklet 22 pages

Cat. no. 898

\$3.75

PERPETUAL MOTION HISTORY

PERPETUAL MOTION THE HISTORY OF AN OBSESSION

by Arthur Ord-Hume

People for centuries have attempted to build a machine that will produce more energy than it consumes. And they've all failed.

If you think you've invented a new type of perpetual motion machine, you had better read this book. Chances are, it has already been attempted.

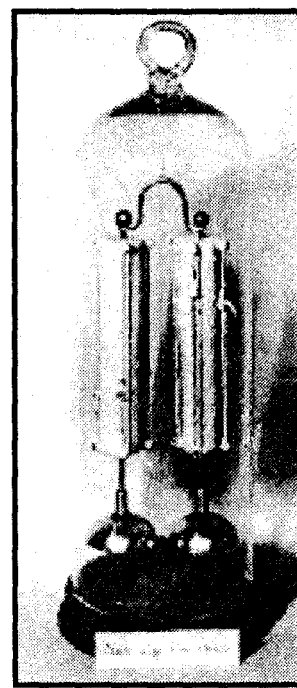
For the rest of us, this book is interesting reading. There are some machines, that don't actually produce energy, but they run seemingly forever on a small amount of energy, like Singer's perpetual chime that was set up in 1840 and is still operating!

Learn about medieval machines, self-moving wheels, lodestones, electromagnetism, steam, capillary attraction, sponge wheels, Cox's machine, the Redheffer device, the Keely motor, odd ideas about vaporization and liquification, the barring of perpetual motion devices from the patent office (although the magnet motor sneaked in), rolling ball clocks, and more. You get lots of illustrations, and an excellent list of references for further reading.

Interesting book! Well written and researched. Excellently done. If nothing else, put one in your reference library. It's not all that expensive. 5 1/2 x 8 1/2 paperback 235 pages.

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CURIOUS MECHANICAL MOVEMENTS

by Gardner D. Hiscox

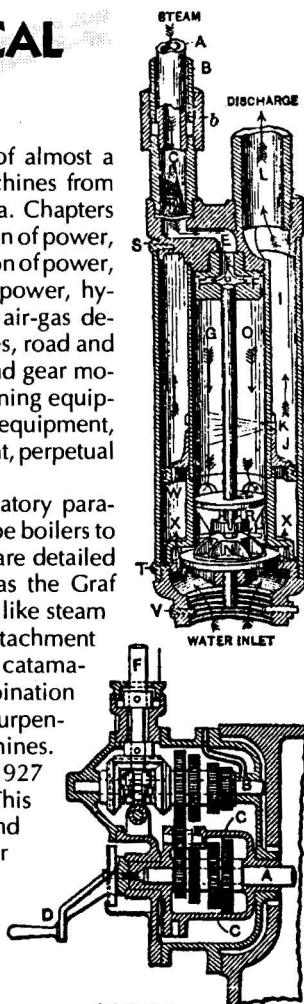
You get one super 1927 picture book of almost a thousand mechanical movements and machines from the simplest to the most complex of the era. Chapters include mechanical power lever, transmission of power, measurement of power and springs, generation of power, steam power appliances, explosive motor power, hydraulic power, air-power motors, gas and air-gas devices, electric power devices, marine devices, road and vehicle devices, railway devices, gearing and gear motion, motion controlling devices, clocks, mining equipment, mill and factory machines, textile equipment, construction machines, draughting equipment, perpetual motion, and electronics of the era.

You get a detailed drawing and explanatory paragraph for 998 different devices from flash tube boilers to double circuit crystal sets. Not all drawing are detailed enough to allow you to build one, such as the Graf Zeppelin or an early monoplane, but others like steam injectors, spring motor, and the lathe taper attachment are quite good. You'll see printing telegraphs, catamaran sail boats, two-cycle Weiss engine, combination steam and gasoline motor, a flour packer, a turpentine still, and over fifty perpetual motion machines.

The majority of devices presented are 1927 "high-tech" rather than simple mechanisms. This is a treasure trove of ideas for the inventor and experimenter, a valuable research tool for designers and historians, and a fun book for the rest of us to read. You're paying much less than I did for the original. You'll really enjoy it. Get a copy.

5 1/2 x 8 1/2 paperback. 412 pages

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507 MECHANICAL MOVEMENTS

by Henry T. Brown

reprinted by Lindsay Publications

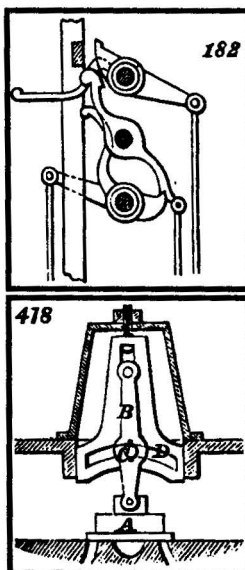
Originally copyrighted in 1868, this 1893 printing carries a complete title of "Five hundred and seven mechanical movements embracing all those which are most important in dynamics, hydraulics, hydrostatics, pneumatics, steam engines, mill and other gearing, presses, horology, and miscellaneous machinery; and including many movements never before published and several which have only recently come into use."

You'll find each left-hand page carries nine illustrations, and each right-hand page presents brief descriptions of their operation. Some of the movements are trivial, but others are quite unusual and interesting. In some cases you'll find that these movements were popular at one time, but are no longer used. Discover Fairbairn's bailing-scoop, Anderson's gyroscopic steam engine governor, or Clayton's sliding journal-box.

If you design machines, this can be very useful to you as practical how-to info. Design and build table-top demonstrations of these movements. Great project ideas! At the very least you'll find this a great book to browse through on a rainy afternoon. Very interesting. 6x7 paperback 128 pages

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Repair Briggs & Stratton

HOW TO REPAIR BRIGGS & STRATTON ENGINES 2ND ED

by Paul Dempsey

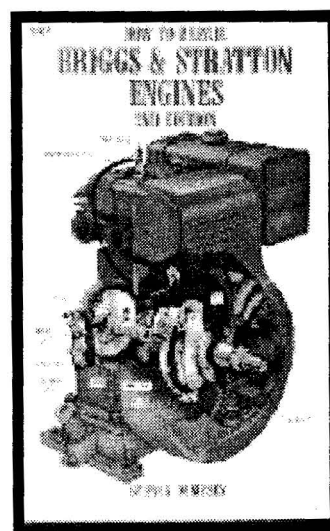
With this book and some scrounging you can recycle old Briggs & Stratton engines. Or you can keep your lawnmower going just one more year. Or build an emergency power plant. Or...

Chapters include: basics, ignition, carburetors, governors, starters, charging systems, and total rebuilding. This book is loaded with practical how-to: adjustments, troubleshooting, assembly diagrams, charts, hints and tips and all the rest.

B&S engines are common. It seems that you should be able to pick up junkers and combine the parts to get running engines at little cost. Good basic repair book. Get a copy. 5 1/2 x 8 1/2 paperback 190 pages

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WATCH BRICK MAKERS! SEE A LIME KILN!

HISTORIC TRADES VOLUME 2

by Williamsburg Foundation

More trades from Colonial Williamsburg!

You'll enjoy the chapter on brickmaking. Learn how clay was chosen, test fired, weathered, tempered, and molded into bricks. After the green bricks dried, they had to be hacked until moisture dropped to 10 to 14%. Then the kiln was built and fired with wood for about four days. After that the kiln was opened and the finished brick removed. Extensive photographs will make you feel as though you're a part of the crew. Fun!



If that's too strenuous for you, you can always make a knotted bed rug that looks like a fancy bedspread or bizarre quilt. They're very nice! You also get a short chapter entitled "Skilled Black Virgians and the American Revolution". As a bonus you get several pages on the lime kiln and its operation.

Interesting stuff! Get a copy! 7x9 paperback 91 pages

Cat. no. 1333

\$8.95



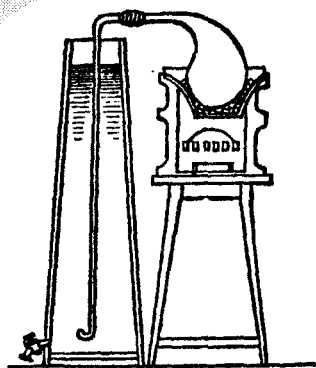
Glue, Grease & Matches

MECHANICS NOTEBOOK 18 GLUE, GREASE & MATCHES

reprinted by Lindsay Publications

From "The Techno-Chemical Receipt Book" (1886) by Brannet & Wahl come formulas and instructions for making adhesive grease, grease for water-proofing leather, lubricants for machines, and more. Learn how to make glue and extract gelatin from hides, bones, and cartilage. Make isinglass (fish glue), printer's rollers from glue and glycerin, and more. Make Swedish matches, parlour matches, matches inextinguishable by the wind, and more. 5 1/2 x 8 1/2 booklet 15 pages
Cat. no. 846

\$2.00



PAPERMAKING



PAPERMAKING The History and Technique of an Ancient Craft by Dard Hunter

Hunter (1883-1966) is regarded as THE authority on papermaking. In this book he reveals what he found in traveling throughout the world watching different cultures making their paper. The result is a fascinating history of papermaking and of the wide variety of technology used, much of it being very simple.

"He examines the development and uses of the different materials and tools of

papermaking: the different types of hand moulds, such as the 'wove' and 'laid' mould of China; methods of maceration (beating the pulp); of dipping the moulds or pouring the liquid pulp over the moulds; of pressing, drying and sizing the paper...

Over 320 illustrations show actual pages from rare books and scrolls from every corner of the world, scenes of past and present-day papermaking, tools, material and watermarks. A two-page map traces the 1000-year journey of papermaking from China to Europe, and a chronology of paper... over 4500 years..."

If you're interested in paper, you MUST have this classic. This is a reprint of the 1947 2nd edition. Excellent. Fascinating. Consider it carefully. 5 1/2 x 8 1/2 paperback 672 pages
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UNUSUAL LITTLE CATALOG!

You may want to write for a sample copy of "The Catalyst", a booklet/catalog filled with several how-to articles along with offerings of kits, books and chemicals. I found it interesting. You might, too. Send a buck to:

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Santa Barbara CA 93140-1960

Tell Lindsay sent ya....

HOW TO MAKE MIRRORS

HOW TO MAKE MIRRORS

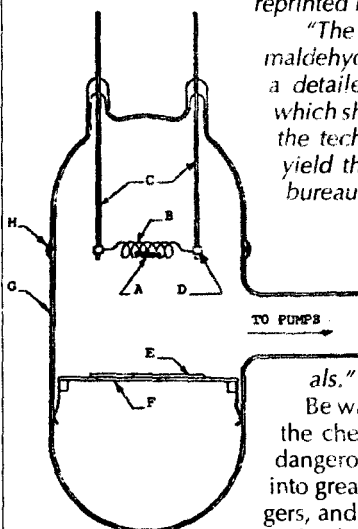
reprinted by Lindsay Publications

"The Brashear, rochelle salt, and formaldehyde formulas are given, together with a detailed discussion of the precautions which should be taken to avoid danger and the technique which has been found to yield the most satisfactory results at the bureau. Methods are also given for the production of reflecting films on glass by the chemical deposition of copper, platinum, or lead sulphide, by cathode sputtering, and by the condensation of vaporized metals."

Be warned that should you mix some of the chemical too strong, there may be a dangerous explosion. But the manual goes into great detail about eliminating the dangers, and the practice of silvering. It is written for the beginner and leaves very little to

the imagination. A reprint of a 1931 booklet issued by the Bureau of Standards. Excellent! 5 1/2 x 8 1/2 booklet. 15 pages 2 drawings.
Cat. No. 885

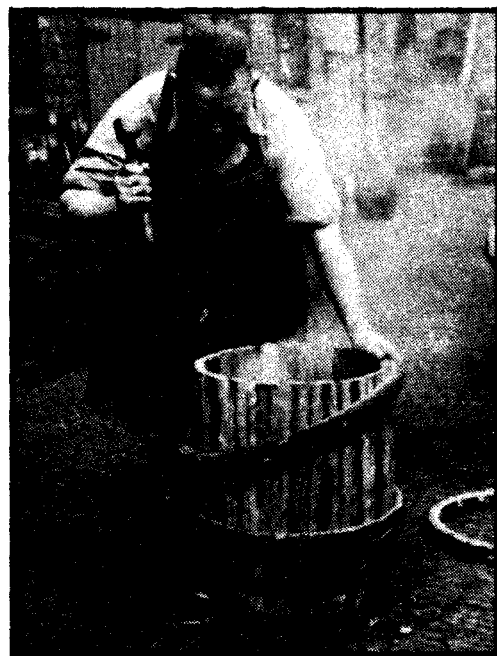
\$3.00



THE COOPER AND HIS TRADE by Kenneth Kilby

Make a barrel. Go ahead! I dare you! Think about it. You take lumber, cut it into a number of curved, tapered staves, install circular end boards and hold it all together with iron bands. And on top of that, everything has to be so finely fitted that the finished product is water tight! Go ahead. Make a barrel. I dare you!

This book, originally pub-



Make a Barrel! I Dare You!

lished in 1971 in England, covers the technology of barrel making in its first five chapters. The history of barrels and the men who made them is revealed in the remaining chapters.

You'll see buckets, barrels, and tools that go back as far as the Roman times in England. And you'll see the power machinery that is still used to make barrels

for distillers.

This is fascinating reading on a technology that is disappearing. If I had more time, I'd try my hand at coopering, but for now, I'll just read this book and imagine. Good book.

Consider it. 6x9 paperback 192 pages 56 pages of photos - 87 drawings

Cat. no. 482

\$19.95

NEON SIGNS

NEON SIGNS

by Miller & Fink

reprinted by Lindsay Publications

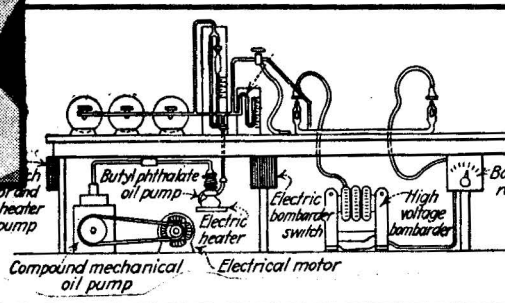
Sure. Equipment, techniques, and sign design have changed since this book first appeared in 1935, but not all that much.

Even if you're not interested in making neon signs, you'll find loads of useful information on rare gases, glass blowing, and vacuum systems that could be useful in experimental physics, high voltage, or even in building your own experimental vacuum tubes!

Chapters include the luminous tube, materials, electrical equipment, types of signs, designing the sign, glass bending, pumping systems, bombarding, filling, testing, aging, installation equipment, special applications, tricks of the trade and more!



for motor and electric heater for B.P. pump



Great How-To on Glass Blowing, Vacuum Systems, High Voltage and more from 1935!

This is a quality straight-to-the-point book loaded with diagrams and photographs that you won't find just anywhere. It might be fun to make bizarre neon signs, repair "antique" signs, or just get into the trade. But even if that's not your goal, you'll find loads of unusual, interesting information.

Consider this carefully. It certainly is NOT run of the mill. Order a copy. 5 1/2 x 8 1/2 paperback 288 pages
Cat. no. 20340

\$12.95

CHRISTMAS GIFTS

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- UPS COD is available but is slower than other methods due to additional processing. And there's an additional charge of several dollars. Charge card orders are faster to process.

If you can help us in these ways, we'll do everything we can to get your order to you by Christmas.

MAGNETISM

AN INTRODUCTORY SURVEY by E. W. Lee

The back cover of this book explains it all very well...

"The lodestone was known to the ancient Greeks; the Chinese knew of the compass a thousand years ago; in the 16th century Gilbert described magnetic poles. Professor Lee takes us through the early experiments to the first modern accomplishments of Oersted, Ampere and Faraday. We then learn the principles behind electric motors, dynamos, transformers, permanent magnets, synchrotrons, solenoids, memory banks in computers, betatrons, magnetic supercooling,

Introduction to MAGNETISM

and other modern applications....

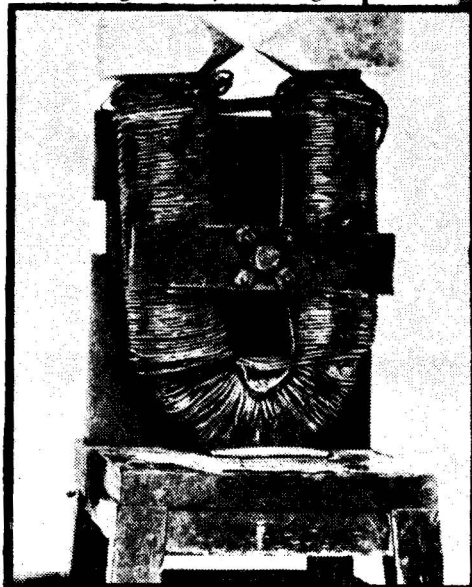
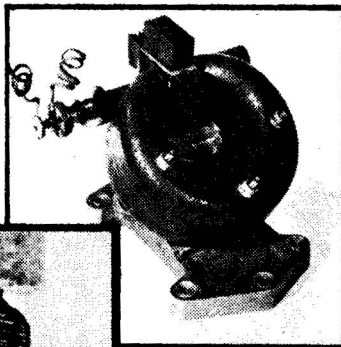
"The author shows us how magnetism 'works,' with reference to such concepts and prin-

ciples as lines of force; ferromagnetism; the atomic theory of matter in relation to electromagnetic properties; paramagnetism and diamagnetism; quantitative measurement of magnetic force; domains and domain boundaries; high-permeability alloys, their theoretical basis and uses; magnetic matrices used as computer-age storage devices; ferromagnetism and antiferromagnetism; the use of magnetism in modern scientific research; and problems of the earth's magnetism, including its meaning to Wegener theory of continental drift and solar phenomena."

You get 60 diagrams and sketches and more than 32 pages of photographs. If you want to explore the theory, you can study the mathematics that explains magnetism.

This is one heck of a lot of book for the money. And it's must reading for basement engineers, experimenters, even the guy who's trying to build a magnetic motor or perpetual motion machine. Great background information. Order a copy. 5 1/2 x 8 1/2 paperback 281 pages
Cat. no. 365

\$6.95



*Not too simple
Not too complex
Just right!*

The Remarkable Boy Mechanic



BOY MECHANIC - BOOK 1

compiled by H. H. Windsor
reprinted by Lindsay Publications

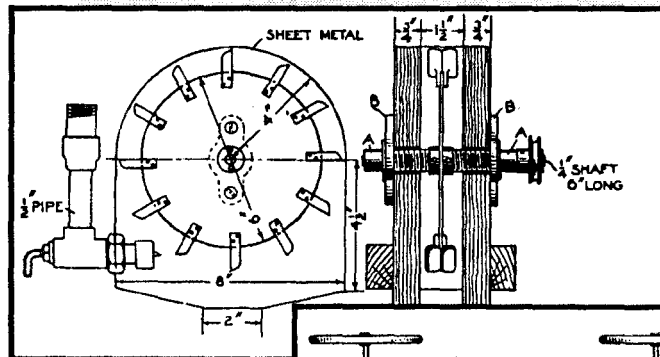
"700 Things for Boys to Do. How to construct wireless outfits, boats, camp equipment, aerial gliders, kites, self-propelled vehicles, engines, motors, electrical apparatus, cameras and hundreds of other things which delight every boy."

You may have thumbed through a copy of Boy Mechanic when you

BOY MECHANIC - BOOK TWO

reprinted by Lindsay Publications

"1000 things for Boys to Do. How to construct devices for winter sports, motion-picture camera, indoor games, reed furniture, electrical novelties, boats, fishing rods, camps and camp appliances, kites and gliders, pushmobiles, rollercoaster, ferris wheel and hundreds of other things which delight every boy with 995 illustrations."



were a kid and dreamed of building just a few of the fantastic projects shown. You probably don't remember this 1913 volume.

You get wall-to-wall projects that in most cases are

not too detailed, but are more than enough to whet the appetite and make you want to get started. Build a Wright-brothers style handglider! A Wimshurst machine! An arc light! An electric stove! A toy steam engine! A telegraph key! A water rheostat! An alarm clock chicken feeder! A fiat bottomed boat! An induction coil! A library table! A machine to put paraffin on wire! A pipe fitting steam engine! An electric postcard projector! An ammeter! A paper hot air balloon! A workbench!

You'll find information on imitation arms and armor, magic tricks of all kinds, chair carting, sundials, homemade phonographs, gymnasium equipment, an ice yacht, a pipe fitting lathe, a paper boat, a cross bow, an electric motor, glass blowing and much, much more.

Many people have asked us to reprint the Boy Mechanic. One look through it, and you'll see why. It's a combination of practical projects, not-so-practical projects, crazy ideas, and plain ol' fun nostalgia. It's a classic book well worth your consideration. Order a copy today! 5 1/2 x 8 1/2 paperback 469 pages

Cat. no. 4880

Learn how to do plane-table surveying and make accurate maps. Once you've mastered that, you'll be shown how to do the same job from carefully taken photographs. Make a four-passenger bobsled, and ice glider, snowshoes, snow-ball thrower, paddlewheel boat, tandem monoplane glider, movie camera and projector, laboratory gas generator, soap box racer, oil burner for cook stove, combination lock for a drawer, magic tricks, electric score board, disc-armature motor, and hundreds of other things.

You get wall-to-wall illustrations. You may attempt only two or three projects, but that's okay You'll have countless hours of fun just browsing through this idea-generating volume from 1915. It's great.

Like volume one, this is a classic worth having. Fascinating! Order a copy. You'll like it.

5 1/2 x 8 1/2 paperback 473 pages

Cat. no. 20676

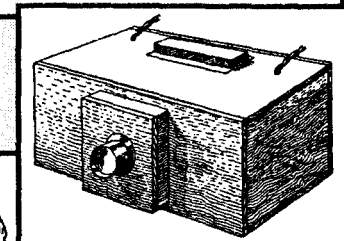
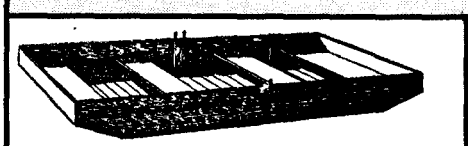
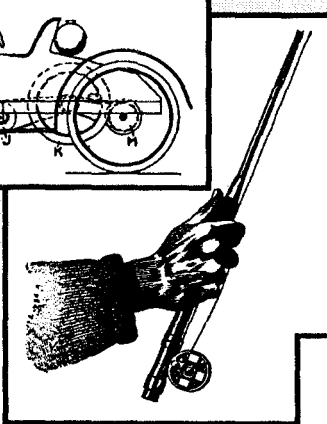
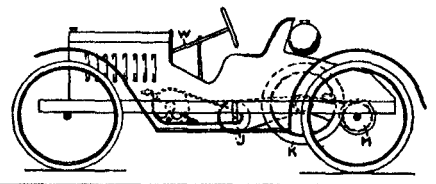
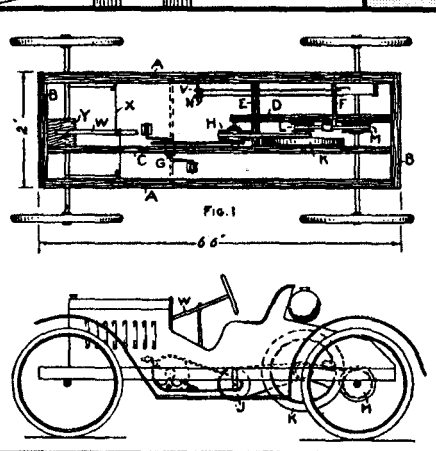
\$18.95

SPECIAL HARDCOVER EDITION

for libraries and collectors. Only a fraction of the printing has been so bound. May be out of stock for long periods of time depending on supply and demand.

Cat. no. 20684

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\$18.95

THE PROP BUILDER'S MASK-MAKING HANDBOOK

by Thurston James

Here's another great book from the author of *The Prop Builder's Molding and Casting Handbook*. It's well illustrated and top quality.

Making masks can be a lot of fun, but even if you're not into making a mask to cover your mother-in-law's ugly puss, you'll learn valuable lessons in working with materials. And these lessons should be applicable to other projects.

The basic sections include masks and persona, early man and his masks, life masks, the neutral mask, character masks, leather masks and the commedia dell'arte, mask-making workshop in Padua Italy, making a mask in leather, other leather-working techniques, and appendix.

Discover how to make an alginate life mask of that favorite person in your life (other than your dog or bartender). Make positive and negative molds, and make a positive plaster copy of the life mask.

Make a plaster negative mold from an original mask design and use it to make paper mache, latex rubber, neoprene or "friendly" plastic positives. You can make a positive gypsum cement mold. And you'll learn how to create a mask from a positive mold by vacuum-forming, thermoplastic orthopaedic tape, celastic, and glue cloth. You'll also learn how to decorate the mask with fabric, animal fur, and how to simulate a metal finish.

The second half of the book will show you in detail how to work leather into incredibly beautiful masks. You get all the details on tanning, molds, tools, making splices, finishing, coloring and more. These are works of art — something to be proud of.

You'll learn how to turn sheet metal into a beautiful mask with chasing and repousse. Then you'll learn the techniques involved in producing fantastic halloween masks. You'll learn skills and secrets. You may be able to make big bucks since masks are popular decorating items. Who knows?

Excellent book. Wall to wall how-to. Heavily illustrated. A book definitely worth having. Get one! 8 1/2 x 11 paperback 203 pages
Cat. no. 1340

\$19.95

INCREDIBLE MASK MAKING HANDBOOK!



LEARN TO PRINT!

GRAPHIC ARTS FUNDAMENTALS

by John R Walker

Don't know beans about printing? Learn here. Dig into this technical school textbook and learn how to get ink on paper.

Chapters include history of graphic arts, careers, safety, basic printing processes, relief printing, lithography or offset, intaglio printing, screen printing, heat transfer printing, ink jet printing, auxiliary operations, binding and finishing, design, color, photography, papers and papermaking, inks office graphics art equipment and more.

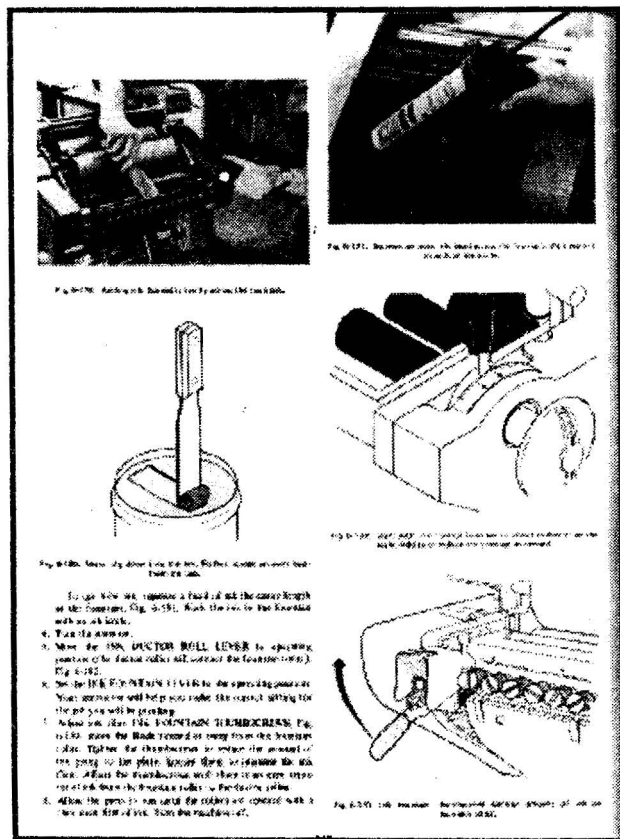
You can learn to set type from a California case using a composing stick, lock it up in a chase, pack the tympan and start printing. But you can also learn about photo offset, typesetting methods, screening prints, making plates and all the rest. Intaglio is used by the government to

print money, but it is a process you can do, too. Print shirts, decals and posters with the silkscreen process. And there's ink jet and even binding instructions.

You won't find desk-top publishing discussed because, after all, this is for young people who want to get into the printing career. And although this is first and foremost a textbook, you get lot's of practical how-to.

I've considered offering other lower-cost printing books, but this one delivers much more for the money. It's a great value. And it's beautifully illustrated with easy-to-read text. If you're looking for that first book on printing, this is the one I recommend. It's worth ordering. Consider it. 9x11 hardcover 320 pages wall-to-wall illustrations
Cat. no. 494

\$26.95





THE PROP BUILDER'S MOLDING & CASTING HANDBOOK

by Thurston James

Try this! Take a dead carp and make a couple two-part plaster molds before it starts to decompose. Then make urethane castings with the molds. These are the Hollywood uses to make



props for movies. This is a great book all about making molds and casts for theatrical uses. You'll learn about one- and two-part plaster molds, a two-part mold using the shim method, molds from dental alginate and moulage, and a variety of molds using latex rubber, Silicone RTV rubber, injected Silicone molds and more.

The Secrets of Casting Almost Everything Except Metal!



You'll learn what type of release compound to use for each combination of mold and casting material.

Then you'll learn how to do absorption casting with latex and neoprene casting rubber. You can make papier-mache, Celastic and fiberglass casts. You can cast with hot melts such as wax, machinable wax, hot plasticine, hot melt glue, and hot melt rubber. You can make fake "glass" bottles to break over people's heads, or panes of glass to safely throw people through during a barroom brawl (or the Christmas family get together). You might want to cast with polyester resins, urethane foam, plastic wood, Durham's Rock Hard and more.

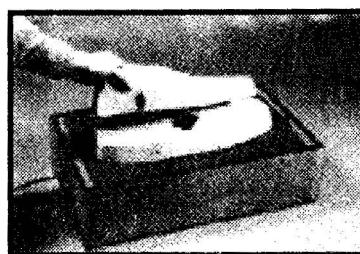


Then there is a whole section on vacuum forming with thermoplastics using a large, high-performance, home-made vacuum forming machine. You can watch as artists reproduce railings, cornice molding and even tile roofs in lightweight plastic sheeting. It's quite impressive. And the whole book shows you how you can do it, too.

You could probably make rubber masks of your mother-in-law's face and sell them at Halloween.

Wall-to-wall photos. Detailed how-to. Hints, tips and secrets. This is a book on casting practically everything EXCEPT

metal. Rare information. I think you'll really like it. You get your money's worth, and then some in my opinion. 8 1/2 x 11 paperback 236 pages Cat no 1328 \$19.95



"...do simple forming for around \$15.00 or less..."

MOLD PLASTICS! Build a Vacuum Forming Machine

Do It Yourself Vacuum Forming by Douglas E Walsh

The author wrote me:

"When I tried to do research for this book I was surprised at how little information there was on the subject of Vacuum Forming. When I was put in charge of buying a machine for where I work, I was amazed at how few sources there were and the high cost of a simple machine....

I tried the obvious way first, as I'm sure many other have by using a kitchen oven and shop vacuum cleaner. The results were OK, but limited to simple parts in thin plastics. The oven part works fine but the vacuum cleaner just didn't provide enough vacuum. This must be what discourages most people because real vacuum pumps cost hundreds of dollars...

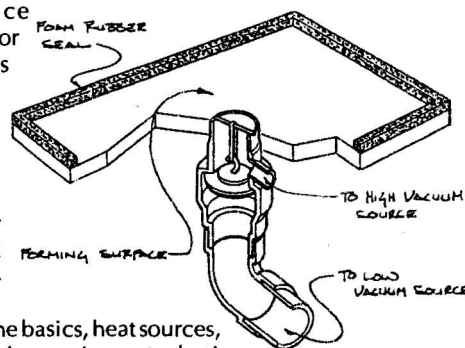
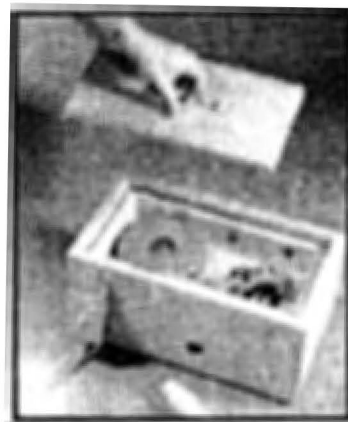
Not to be discouraged, I thought about it some more and came up with eight other sources for vacuum, most of which are inexpensive and one is totally free! I was then able to combine a vacuum cleaner with a cheap source of higher vacuum. This gave me that magic combination of high vacuum and high flow necessary for serious forming.

This easy-to-read book shows you how to get set up to do simple forming for around \$15.00 or less if you scrounge for parts. You can also build a two-stage high vacuum system for \$50-\$60 that can form up to 1/4" thick plastics...."

You can produce magnetic signs, parts for models, and all kinds of things if you use your imagination. You can put this simple, but powerful mass-production technique to work for you because you don't have to spend a fortune on equipment.

Chapters include the basics, heat sources, vacuum sources, forming equipment, plastics, molds, forming and finishing. You get straight forward to-the-point how-to with plenty of photos and drawings.

Possible money maker! Fun to try. Here's an excellent book by a man who has done it, and explains it clearly. Get a copy! 5 1/2 x 8 1/2 booklet-style spine 128 pages Cat. no. 1308 \$9.95





HOW TO START A BUSINESS WITHOUT QUITTING YOUR JOB

by Philip Holland

If you think you're going to keep your present job forever, and you'll never have to face the prospect of losing it or taking pay cuts, then I'd say you're a damned fool. The world is changing and will continue to change. There are no guarantees in life. And you could be looking for work very shortly.

If you're self-employed, you stand a much better chance of surviving. Ask anyone who successfully runs his own business. You can bet that in hard times the owner will be the last person to get laid off. It's tough to start a business, but it is done everyday, and it can be fun. It does NOT take brains, education or money. It takes hard work, belief in one's self, some pride and an idea. You can get ideas from this book. You have to supply the rest.

You'll learn how to get a

business going on the side. You'll explore the possibilities, problems with financing, involving the family, deciding when to quit your job, and more. And I like the one chapter entitled "It's never too late". Ask Col Sanders. He started Kentucky Fried Chicken when everyone else retired. He sold it in just a few years for two million dollars!

Lindsay Publications started in a corner of a basement after hours with \$50. One of our current warehouses is more than big enough to house an NBA basketball court and bleachers. You can do it, too.

This book will NOT supply all the answers. It will point you in the right direction. Moonlighting is a safe way to test your ideas before you jump in with both feet.

Get a copy, and create a job over which YOU have control. You'll have a better chance of weathering hard times down the road. Join a very exclusive fraternity of people who have graduated from the school of hard knocks. Consider this carefully. 6x9 paperback 168 pages

Cat. no. 6046

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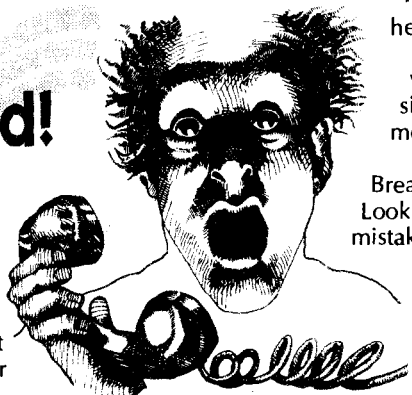
You Deserve a Whack on the Head!

A WHACK ON THE SIDE OF THE HEAD

by Roger von Oech

"How You Can Be More Creative".

Think about it. What makes some people special? They seem to have all the ideas and all the success. People beat a path to their door when problems are hard to solve. What do they have that few other people have? Creativity! They use their



heads. You can do the same.

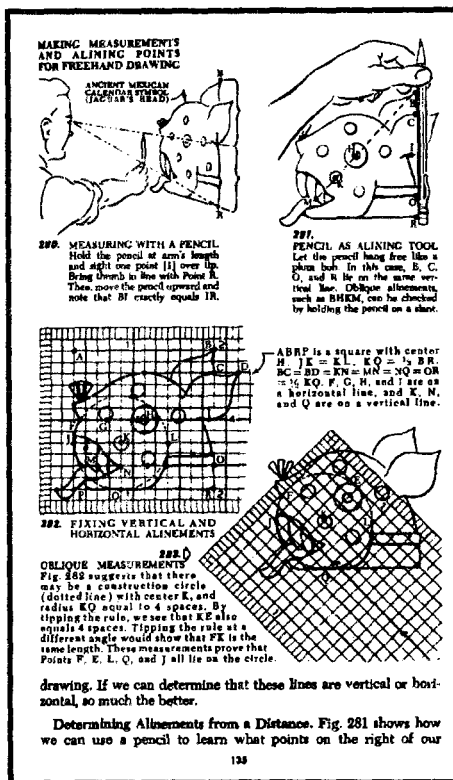
Isn't it amazing what a human being can do when he decides to give himself a whack on the side of the head? (Just don't use a ball-pein hammer!)

You can be far more creative. Be foolish. Break the rules. Be impractical. Get out of your box. Look for "wrong" answers. Seek ambiguity. Make mistakes... and set your creative self free.

This is a best seller first released in 1983 and just updated. Great illustrations. Even better text! Get a copy, and get going! 6x9 paperback 196 pages

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THINKING WITH A PENCIL

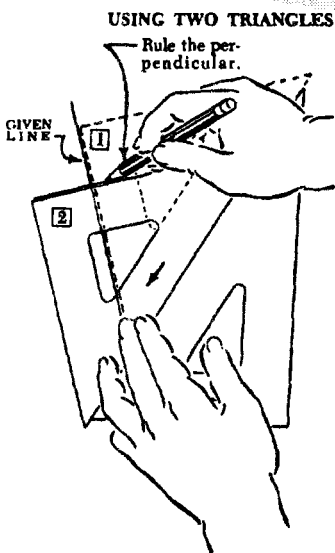
by Henning Nelms

"With 692 illustrations of easy ways to make and use drawings in your work and in your hobbies."

"Originally published in 1957, *Thinking with a Pencil* was one of the very first books to attempt to break through the conceptual barriers between words and images... It explains how to draw for those who want to use it for that purpose, but the real value is in the fresh techniques of using illustration as a thinking tool and as a means of organizing and presenting ideas."

I know some really talented mechanics and machinists who build new ma-

Think With a Pencil!



chines by trial and error. If they would only take a few minutes and sketch out their ideas, refine them on paper, they'd find that they'd make fewer mistakes and fewer false starts once they got out into the shop. In other words, thinking with a pencil would make them more successful. I've been doing this for years. You should, too.

If you don't know how to think with a pencil, then get a copy of this book. It's good. You'll learn everything from drawing, to isometric drawing and more. A lot of book for the money. Master this skill. Order a copy of this classic text today. 6x9 paperback 347 pages

Cat. no. 6023

\$14.95

BASIC BOOKBINDING

by A. W. Lewis

Bookbinding is a centuries-old skill that every book freak (that means you and me) should try. It's not all that complicated. And you'll find people are amazed when you show them a book that you have bound.

There all kinds of binding books on the market. This is probably not the best, but it's so inexpensive, everyone can afford a copy. You can make the special equipment you need. And

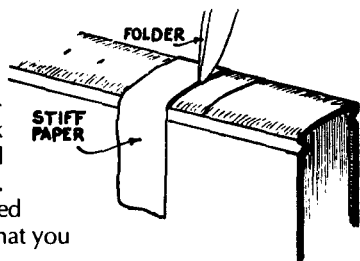
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Bind Your Favorite Books!

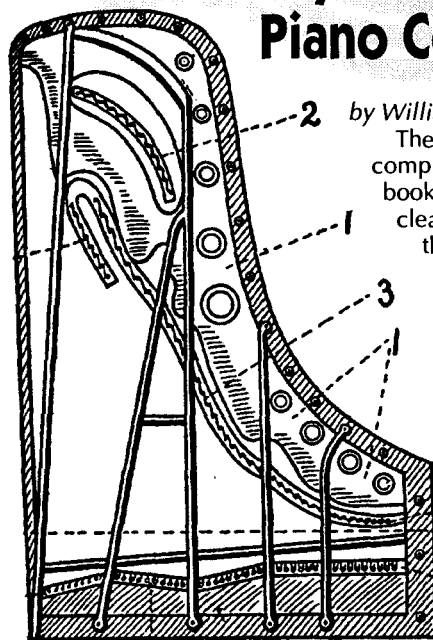
you get use locally obtained materials. I know. I've done it.

It takes time to bind a book. But it's fun. Try it. Order a copy of this. 5 1/2 x 8 1/2 paperback 144 pages
Cat. no. 436

\$3.95



Theory and Practice of Piano Construction



2 by William B. White

The modern pianoforte is a complex instrument, but this book makes it seem simple as it clearly and concisely shows the layman how a pianoforte is built. Every step in the construction of a pianoforte is analyzed, and all the principles that underlie the various construction processes are thoroughly explained.

Beginning chapters describe the modern pianoforte and its evolution, the laws of sound in connection with the pianoforte, and the acoustics of pianoforte strings. Then, the important principles involved with the musical scale and equal temperament are presented. Next is a discussion of pianoforte strings and their proper dimensions, the resonance apparatus, the frame (both grand and upright), and the touch mechanism. The chapter on the touch mechanism is particularly extensive including illustrations of the standard American grand and upright mechanism actions and those of many of the earlier actions. Following it are very detailed chapters on the regulations of the touch mechanism and tuning: they enable anyone, with a little manual skill and sufficient practice, to tune and repair his own piano. The book concludes with the draughting of the pianoforte scale and two appendices, one on the development of the player piano and one on the small grand.

A piano is as complex and maybe more so than many steam engines, and every bit as beautiful in operation. If you've ever thought about repairing a player piano, for instance, you've discovered this. You may not be interested in building a piano, but the mechanism is an interesting one. Discover the piano! Reprint of 1906 edition 5 1/2 x 8 1/2 paperback 160 pages
Cat. no. 596

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LOCKS & LOCKSMITHING 3RD EDITION

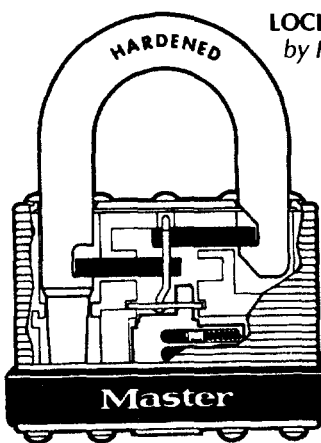
by Roper & Phillips

From the back cover:

"Whether you're an experienced locksmith, someone who's just starting out in the locksmithing business, or a do-it-yourselfer who wants to put in his own security system, there is no better place to turn for guidance in selecting, installing, and maintaining today's most advanced locks and security hardware..."

You'll find the very latest information on

•All kinds of locks and keysets – including pad-lock, warded, lever,



disc-tumbler, schlage wafer-tumbler, pin-tumbler cylinder, double-

BE A LOCKSMITH!

bitted, and combination •Home, business, office, automotive, auxiliary door, and vending machine locks •High-security mechanical locks and electrical access and exit control systems •Master keying systems •Lock decoding, lockpicking, and emergency entry tools and procedures •The business and law of locksmithing, including standards for locksmith licensing, bonding, and certification •Locksmithing equipment manufacturer and suppliers •Plug follower and holder diameters for today's most popular locks..."

This is a book we have offered for many years – updated and better than ever. Loads of illustrations and practical how-to. Excellent book. Order a copy today! 7 1/2 x 9 paperback 437 pages
Cat. no. 110

\$19.95

Engraving Glass A Beginner's Guide



Boyd Graham

ENGRAVE GLASS!

ENGRAVING GLASS
A BEGINNER'S GUIDE
by Boyd Graham

You've seen amazing beautiful designs in glass, I'm sure. Here, you can learn how it's done. You no longer do you have to be amazed. You can amaze others!

Chapters include engraving techniques and equipment, getting started, projects, choosing glass blanks and designs, vase engraving demonstration, other techniques and tools, displaying

your work, as well as a list of materials and suppliers. Boyd Graham is a prize winning engraver, and when you see the work he does, you'll know why. You'll find over a hundred illustrations to help you learn quickly. And the copy on the back cover asserts that you'll discover that glass engraving is far easier than you might have imagined.

This book will fit right into your library. Before long you'll be able to melt sand into glass, blow a beautiful vase, and then engrave your girlfriend's face (or other parts of her anatomy) into it! While you're at it, engrave one for me, too!

Great little book on an unusual skill. Reasonably priced. Get a copy! 5 1/2 x 8 1/2 paperback 128 pages
Cat. no. 485

\$7.95



THE MONUMENTS OF MARS

by Richard C. Hoagland

From the back cover:

"Either these features on Mars are natural and this investigation is a complete waste of time, or they are artificial and

this is one of the most important discoveries of our entire existence on Earth. If they are artificial it is imperative that we figure them out, because they do not belong there. Their presence may be trying very hard to tell us something extraordinary." Richard C. Hoagland

A painstakingly researched study of incredible NASA photographs indicates that a highly advanced civilization may actually have inhabited Mars hundreds of thousands of years ago.

In 1976, NASA sent four Viking spacecraft to Mars to photograph the planet and test for the presence of life. As part of the mapping sequence, one of the orbiters photographed a mile-long mesa that uncannily resembles a human face. Richard C. Hoagland now in the forefront of the Mars investigation discerned the presence of additional monuments and structures, including what is possibly an underground city, through careful analysis of NASA's photographs

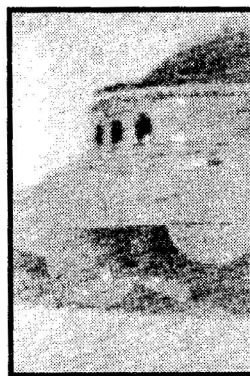
Mysterious Monuments on Mars?

and consultation with scientists. The artifacts are the 1,500-foot-high human-like 'face' and a surrounding complex of massive, hollow pyramids possibly containing a message encoded in their geometrical arrangement.

This third edition contains new photographs and updates the discoveries made in the last several years particularly the numerical relationships of the objects and is being published in response to literally thousands of requests for such information...

Personally, I don't believe this anymore than I believe there is a Bermuda Triangle. But whether or not you want to believe Mars was inhabited by a long-dead civilization or not is immaterial. Anyway you slice it, this is interesting reading. Great photos. Even a skeptic like me can enjoy this. Consider it carefully. 6x9 paperback 420 pages

Cat. no. 767 \$16.95



THE UFO ENCYCLOPEDIA

compiled and edited by John Spencer

"Authoritative, fascinating and highly read-



UFO Encyclopedia!

able, here is the most comprehensive encyclopedia of extraterrestrial phenomena ever written. Compiled by John Spencer, one of the world's preeminent UFOlogists, The UFO Encyclopedia incorporates the latest research and remarkable findings from all corners of the Earth to illuminate virtually every aspect of this astounding field of interest—with clear, concise and revealing entries listed alphabetically for easy reference ... and covering a multitude of subjects:

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- The Gulf Breeze sightings
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- and more"

You get brief descriptions of all types of events and subjects alphabetically arranged. What Lt. D.C. Brigham saw and when? What where the ghost rocket sightings of the 1930's? What's the Piri Reis map? And there are hundreds and hundreds of other entries.

Again, each entry is brief, but it will provide you with enough information to push you into new areas of research. You also get interesting photos some of which you've probably already seen.

Interesting book. Easy reading. Somewhat expensive, but enjoyable. Consider it. 5x8 paperback 340 pages

Cat. no. 766

\$15.00

THE PHANTOM OF THE POLES

by William Reed

reprinted by Lindsay Publications

The earth is hollow! You get a reprint of an early, rare classic text on the theory that there are holes at the ends of the earth that lead into the interior where there are continents and civilizations that are yet to be discovered. In fact, some people claim that NASA satellites have photographed these holes but that the photos have been suppressed. In this book Reed set out to explain unexpected and unexplained phenomena seen at the poles.

Chapters include flattening of the earth at the poles, length of

THE EARTH IS HOLLOW!

1906 CLASSIC IS BACK!

polar nights, working of the compass, around the curve, mysteries of the polar regions, the water sky - what it is, the aurora, meteors or volcanic disturbances, finding of rock in and on ice, dust in the arctic, open water at the farthest point north and south, why it is warmer near the poles, driftwood - whence



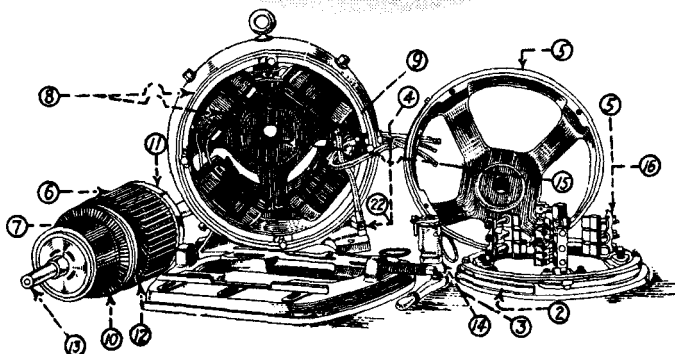
have others that Esquimos inhabited the arctic regions?, what produces colored snow in the arctic, where and how are icebergs formed, the tidal wave, clouds and fogs, arctic and antarctic winds, the centre of gravity, cannot reach the poles, and what is in the interior

You'll find references to this rare 1906 classic mentioned in the few articles published on the hollow-earth theory in recent years. Now you can put a copy in your reference library at a fraction of the cost of an original assuming you can find one. Rare book. Unusual. An essential part of that realm of unusual scientific theories and/or myths that never seem to die. Worth having! Consider it. 4 1/2 x 7 paperback 280 pages

Cat. no. 20609

\$11.95

ARMATURE WINDING AND MOTOR REPAIR



ARMATURE WINDING AND MOTOR REPAIR

by Daniel H. Braymer
reprinted by Lindsay Publications

From 1920 comes this motor rewinding book loaded with drawings and photographs that will show you how to rebuild both AC and DC machines.

Chapters include: DC machines, AC machines, shop methods of rewinding DC armatures, making commutator connections, testing DC armature windings, operations before and after winding DC armatures, insulating coils and slots for winding, shop methods for rewinding AC machines, testing induction motor windings for mistakes and

faults, adapting DC motors to changed operating conditions, practical ways for reconnecting induction motors, commutator repairs, adjusting brushes and correcting brush troubles, inspection and repair of motor starters and generators, diagnosis of troubles, methods to solve special troubles, tables and more.

You'll find a chapter that shows you how to build special tools and jigs, an armature sling, a pinion puller, coil winding machine, a coil taping machine, commutator slotter, armature banding machine and more.

The motors described are large types used in factories. But the principles apply to the smaller

motors you and I use. You'll learn how to reconnect induction motors for different voltages and phases, how to operate a DC motor as a generator and vice-versa, change the DC motor windings for different voltages, and more.

You'll be taught all the techniques - from removing old windings and cleaning slots, to winding the coils, insulating the end connections, inserting the coils, painting the windings, re-lining split bearings, and much more. You get data on all types of wave and lap windings, varnishing and insulating materials, and much more.

I make you no promises, but this is the logical place to start should you want to rewind a motor to particular voltage, wind a generator or alternator for use with a windmill or waterwheel, rewind a big generator for use as a welder, modify a DC motor for use in an electric car, and so on.

This is a beautiful book. You get over 500 pages of clearly written, wall-to-wall practical how-to with excellent illustrations. It's a gem that should be in the reference library of most "machine freaks" (that includes you, son). Get a copy 5 1/2 x 8 1/2 paperback 540 pages

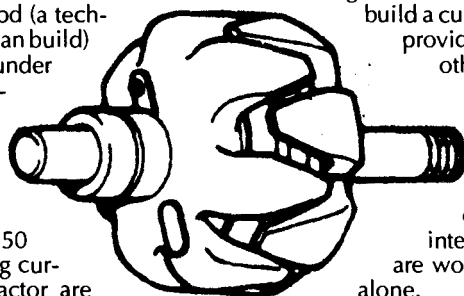
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Basic three-phase and induction motor theory is included. Complete with drawings, diagrams, and capacitor values. 4 1/2 x 7 booklet 20 pages, 18 illustrations - a BARGAIN! Cat. No. 81

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ALTERNATOR SECRETS!

ALTERNATOR SECRETS

If you know the secrets of modification, you can get large amounts of power from a common auto alternator. You can build a portable powerplant driven by a gasoline engine to run brush-type power tools, lights, and AC-DC appliances at remote locations. You can hot-charge storage batteries, or even do light arc welding. Operation of the regulator is explained so that you can build a custom regulator, if needed, to provide regulated output voltages other than 12.

Learn how you can make almost any ordinary induction motor (like an old washing machine motor) put out 120 volts at 60 cycles without rewinding or internal rewiring. These secrets are worth the price of the booklet alone.

We've jammed a ton of information into 16 pages with small type to keep printing costs down so that we can keep the retail price the same as the old edition. Valuable, rare info! Get a copy. 5 1/2 x 8 1/2 booklet 16 pages

Cat. no. 80

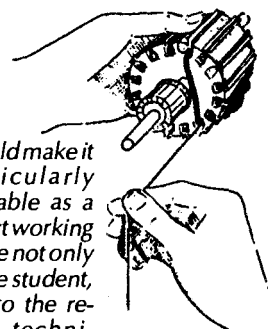
\$3.00

REPAIR MOTORS!

ELECTRIC MOTOR REPAIR

by Rosenberg and Hand

From the preface: "For many years there has been a need for an intensely practical nontheoretical book on electric motor repair and control that could be used by people with little background of electrical knowledge... Inclusion of more than 900 illustrative drawings



should make it particularly valuable as a direct working guide not only to the student, but to the repair technician at the bench as well.

Because the troubleshooter and repair technician must learn to do satisfactory work in the shortest possible time, we have tried to point out the best and quickest methods of testing and repairing.

Both alternating and direct current motors are treated thoroughly, and extensive consideration is given to the connections and troubles in controllers...."

Chapters include capacitor motors, repulsion-type motors, three-phase motors, alternating-current motor control, direct-current armature winding, direct-current motors, direct-current motor control, universal motors, shaded-pole motors, fan motors, dc generators, synchronous motors and generators, three-phase wound-rotor induction motors, and solid-state motor control.

You actually get a book of 349 text pages and a book of 426 illustration pages wire spiral bound into one leatherette cover. This is an industrial reference manual, and it IS quality. If you're serious about repairing motors, then this is a MUST HAVE book. Two books about 6x9 in one unusual cover

Cat. no. 381

\$60.00

THE CARTOON GUIDE TO STATISTICS

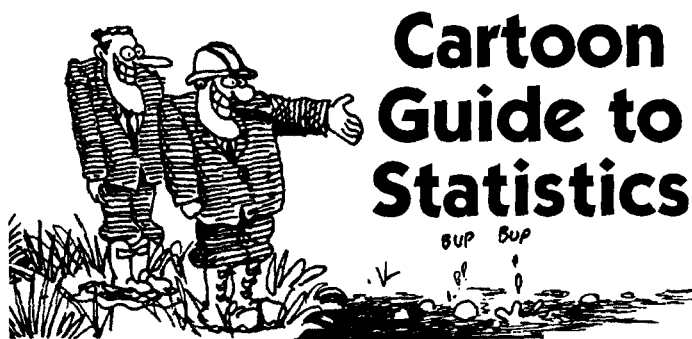
by Gonick & Smith

From the back cover:

"If you have ever looked for P-values by shopping at P mart, tried to watch the Bernoulli Trials on 'Peoples Court', or think that the standard deviation is a criminal offense in six states, then you need the Cartoon Guide to Statistics to put you on the road to statistical literacy.

It covers all the central ideas of modern statistics: the summary and display of data, probability in gambling and medicine, random variables, Bernoulli Trials, the Central Limit Theorem, hypothesis testing, confidence interval estimation, and much more — all explained in simple, clear, and, yes, funny illustrations. Never again will you order the Poisson Distribution in a French restaurant!"

Statistics is a fascinating topic that is really not that hard to understand and is extremely useful. I had this stuff in college, and there it was confusing. Here it's



ALTERNATELY, THE correlation coefficient

IS THE SQUARE ROOT OF R^2 WITH THE SIGN OF b .

$$r = (\text{SIGN OF } b) \sqrt{R^2}$$

THUS, r IS + IF THE LINE GOES UP TO THE RIGHT AND - IF IT GOES DOWN TO THE RIGHT.



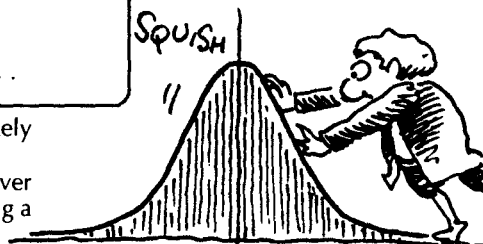
interesting, clearly explained and explained completely with cartoons.

After you've studied this book, you'll know why I never play the lottery. I've used this stuff to determine how big a

utility transformer to hang in an alley to drive a factory full of spot welders. Statistics keeps useless drugs off the market. NASA uses this stuff to greatly reduce component failures. JPL used statistics get beautiful, clear, color photos back from Jupiter and Saturn. And if you're going to Vegas, well....

Statistics allows us to put numbers on seemingly random events. It gives us the ability to predict the unpredictable. You can tap into statistics. Learn from scratch, or use this along with other texts. Use it as a review. I like it. One of the better math books I've seen. Consider it.

7 1/2 x 9 paperback 230 pages
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Be A Speed Demon with Numbers!

HOW TO CALCULATE QUICKLY

by Henry Sticker

From the back cover:

"Do you want to double or triple the speed with which you calculate? Can you run a rapid mental check over the results of your calculating machines? Can you check bills worked out for you by grocery store cash registers, on waiters' checks, on department store charge accounts? Or do you simply take their word for the disposal of your money? Don't envy friends who can perform these calculations with lightning speed and complete accuracy. There is not wholly an inborn ability. You can acquire these skills by the methods described in this book.

How to Calculate Quickly is a tried and true method for helping you in the mathematics of daily life - addition, subtraction, multiplication, division, and fractions.

The author can awaken for you a faculty which is surprisingly dormant in accountants, engineers, scientists, businessmen and others who work with figures. This is 'number sense'—or the ability to recognize relations between numbers considered as whole quantities. Lack of this number sense makes it entirely possible for a scientist to be proficient in higher mathematics, but to bog down in the arithmetic of everyday life.

This book teaches those necessary mathematical techniques which schools neglect to teach: Horizontal addition, left to right multiplication and division, etc. You will learn a method of multiplication so rapid that you'll be able to do products in not much more time than it would take to write the problem down on paper...."

If you're not afraid of a milling machine or a ladle full of molten metal, then why should you be afraid of numbers on paper? On in this case, in your head? Math is a tool. Anyone who avoids math because they're intimidated by it is letting an extremely powerful tool go unused. This inexpensive book of tricks can help you get better use from simple math. Valuable for everyone.

Dirt cheap. Get a copy. 5 1/2 x 8 paperback 185 pages
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\$3.95

Precalculus Mathematics!

PRECALCULUS MATHEMATICS IN A NUTSHELL

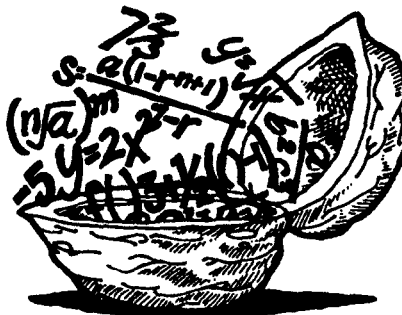
by George Simmons

You can quickly learn or review geometry, algebra, and trigonometry with this excellently written and illustrated paperback.

To really understand calculus, most often it's helpful to explain what's happening with pictures of geometric figures and curves. For instance, calculus uses the process of integration to find the area of irregular areas. Geometry and trig do much the same thing but on a much simpler basis. So

it makes sense to understand the simple techniques before you jump into the more complex (and much more useful) techniques of calculus.

Algebra is simply the short-hand of calc — a way of solving for unknown quantities.



You need to understand it, too.

Get a copy of this. It's simply written, and beautifully illustrated. If there's any fault, it's that each explanation is too short. On the other hand, if they were lengthy, the book couldn't be called "in a nutshell". Quality. It delivers. 7 x 9 paperback. 119 pages.

Cat. No. 549

\$12.95

Practical Math!

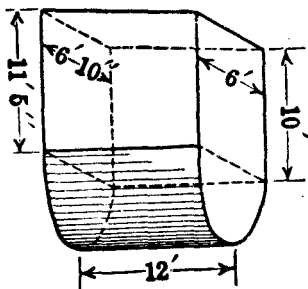
*One of the Most Powerful
Tools Ever Devised!*

PRACTICAL MATHEMATICS FOR HOME STUDY

by Claude Palmer

reprinted by Lindsay Publications

People laugh at me because I carry a pocket calculator in my shirt pocket like any died-in-the-wool nerd would. But the joke is on them. I discovered long ago that math is an extremely powerful tool that can save work, time, and money. Those who laugh



don't know how to harness the power of math. The basic math techniques I carry around in my head and use with my calculator are explained in this book from 1919.

Math is important to mechanics and machinists. It can mean the difference between having a design fail or getting it right the first time. If you're rusty on your math and need a good review, this is the book you should have.

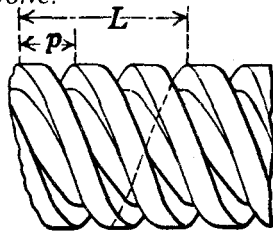
Chapters include common fractions, decimal fractions, short methods, weights and measures, percentages, ratios and proportion, density and specific gravity, and powers and roots.

The geometry chapters cover plane surfaces, triangles, circles, graphical methods, prisms, cylinders, pyramids and cones, spheres, and other solids.

The algebra chapters include notation, formulas and translations, positive and negative numbers, addition and subtraction, exponents and powers, quadratic equations, variation, graphics, logarithms, angles, trig functions, trig tables, right triangle, and more.

You'll learn the math in short, clearly explained lessons. Then you'll be asked to solve problems like "Two steam boilers of the same shape are respectively 12 ft and 15 ft long. Find the ratio of their surfaces." After you solve the problem, you can check it against the answer given.

Another problem asks "To what diameter should a piece of stock be turned so that it may be milled to a hexagon and be 1 3/4 in. across the flats?" -or- "If a wrought-iron bar 2 in. by 1 1/4 in. in cross section breaks under a load of 125,000 lb., what load will break a wrought-iron rod 2 1/2 in. in diameter?" -or- "The pulley on the headstock of a lathe is 3 in. in diameter. This is belted to an 8-in. pulley on a shaft that makes 420 revolutions per minute. At what rate will a block of wood placed in the chuck revolve?"



Triple Threaded

You'll be able to solve these and hundreds of other problems.

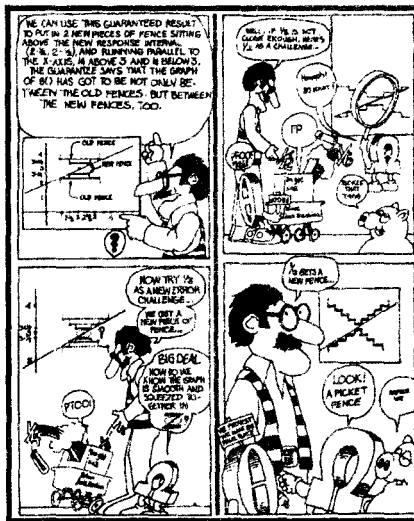
If you've forgotten the math you once knew, or you want to expand your abilities, get a copy of this. It's a big book loaded with valuable lessons. The price is a little bit on the expensive side, but the most comparable modern book I've seen sells for more than twice this one.

Get a copy and get going. It's an excellent text. A great reference. Worth having. Order a copy today. 5 1/2 x 8 1/2 paperback 518 pages

Cat. no. 4775

\$12.95

Great Calculus Books!



PROF. E. MCSQUARED'S CALCULUS PRIMER

by Swann & Johnson

This is the craziest math book I've ever seen! I had calc in college but never in comic book form like this! You should order a copy of this and learn what it has to teach.

Calculus is the difference between engineers and non-engineers. If you would like to read engineering texts and understand what they're talking about, you need a calc background. This won't make you a pro, but you'll understand what functions and discontinuities are, limits, and derivatives. You'll pick up the language and be able to understand scientific talk.

It will take work on your part, but I've never seen a more brilliant explanation of what's happening. This is a tool like a lathe or a table saw. Learn this skill, and it will return dividends for all the years you have left to live. An unusual way to learn the core concepts of calc.

8 1/2 x 11 paperback 214 page comic book.

Cat. No. 51

\$19.95

CALCULUS MADE EASY

by Silvanus Thompson

Fear is often the biggest obstacle to learning math — all those strange symbols! When a calculus book starts out in the first sentence of first paragraph on the first page explaining what the most scary symbols mean, you know it's a good book. The author obviously wants to teach you something rather than scare you.

Any scientist or engineer will tell you calc is a tool not much different from a welder or a lathe. But I took calc from a mathematician in college, and that jerk thought calc was an art form! Most of the time I didn't know what he was talking about (I'm not sure he did either). Who's looking for beauty in numbers? I need to solve problems.

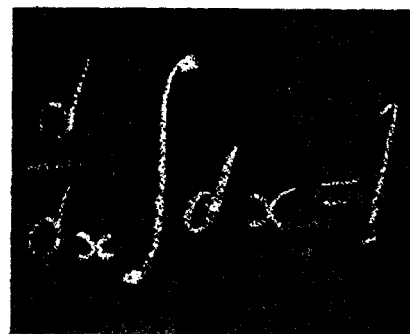
This shows you how useful calculus is. It is as practical an approach as I've ever seen, and the author really takes the fear and confusion out of teaching this math.

Don't get me wrong. Just thumbing through this book is NOT going to teach you calc. You're going to have to work at it. But Thompson's approach is down to earth, and he covers it all: differentiation and integration. And this is 90% of the heavy math you see in engineering books.

A lot of book for the money! If I had had this book at the same time I had that madman mathematician, I probably would have learned a lot more. It's too late for me, but not for you. Order a copy. 5 1/2 x 8 1/2 paperback. 250 pages.

Cat. No. 52

\$8.95



HOW DID THEY DO THAT?

HOW DID THEY DO THAT?

by Caroline Sutton

"Wonders of the Far and Recent Past Explained."

Entertaining. That's all it really is, just entertaining.

You get answers to crazy questions like:

- How did they discover the Hope Diamond?
- How did ballet dancers start dancing on their toes?
- How did they put Al Capone in jail?
- How did they shoot up Fay Dunaway in Bonnie & Clyde?
- How did they break the Japanese secret code in World War II?
- How did Beethoven compose when he was deaf?
- How did they get the stones in place at Stonehenge?
- How did they name the hot dog?
- How did they decide that December 25 was Christmas?
- How did they discover the atom in mostly empty space?

...of course, my favorite question is "Who cares?"

This nonsense is fun to read. It's honest-to-goodness history. No, not that dry, boring garbage they teach in school, but crazy, fun stuff.

Did you ever notice how little knowledge it takes to impress so people? Have you ever noticed how incredibly ignorant all too many people are? This is where the rest of us get our reservoir of knowledge. This is what makes us look so smart. The next time you're having a beer with your buddies and you start spouting this stuff off, they're either going to be very impressed, or you're gonna get carried out of there in a straightjacket. Either way, you'll be the life of the party!

Get a copy of this. Fun reading. Enjoyable. Order a copy today.

6x9 paperback 332 pages

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Keep Those SOB's in Line!

COPING WITH DIFFICULT PEOPLE

by Robert M Bramson

"The proven-effective battle plan that has helped millions deal with the troublemakers in their lives at home and at work!"

The next time they try to pull something like that on you it's not going to work! Bosses, friends, family members, they've made your life hell — until now! Based on fourteen years of research and observation. Dr. Robert Bramson's proven-effective techniques are guaranteed to help you right the balance and take charge of your life. Learn how to: • Stand up to anyone — without fighting • Blunt a sniper's attack • get a clam to talk • cut off a sherman tank at the pass • manage bulldozers • get stallers off the dime • move a complainer into a problem-solving mode

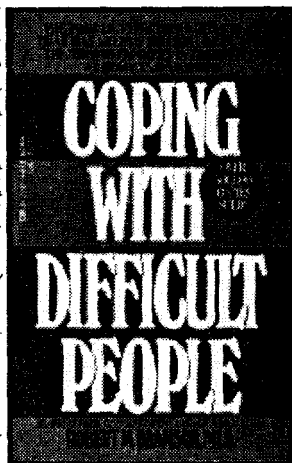
Learn the six basic steps that allow you to cope with just about anyone. Reclaim the power that rightfully belongs to you in any relationship!"

I offered this before in hardcover. Now after 500,000 copies sold, you can have an inexpensive paperback edition. And it IS good.

Personally, I think Bramson wasted fourteen years in research. I come from a long line of microcephalics, and if he had spent only five minutes with my family, he would have encountered every type of emotional retard this side of the Monongahela river! I haven't really needed this book to deal with them since I chained them up in the basement. But you can use it effectively in your everyday life. (If you find yourself in this book, you're in big trouble, because we might be related! Horrors!)

Get a copy. Keep those SOB's in line. 4x7 paperback 226 pages — mercifully, no photos
Cat. no. 708

\$4.95



Big Secrets Revealed!

BIG SECRETS

by William Poundstone

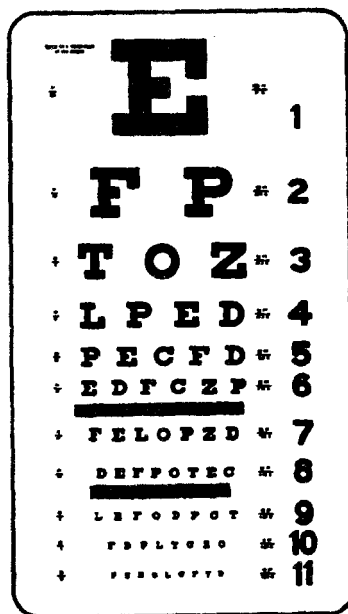
Revealed! All the "big secrets" that have been "suppressed" over the years!

Poundstone covers everything from the formulation of Coca-Cola to Kentucky Fried Chicken's secret herbs and spices. Learn about the weird stuff on money, "secrets" of credit card numbers, universal products codes, the formulation of perfumes, the way playing cards can be marked, the sealing of envelopes and more. Learn how to beat a lie detector and inkblot tests. Learn the secrets of sawing the woman in half, secret radio frequencies, even the truth about Walt Disney's body being frozen in suspended animation.

Crazy, fun reading! Some of it is just BS, but some of it is fascinating. I enjoyed it, and I think you will too. 6 x 9 paperback 228 pages

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WHEN THE SNAKES AWAKE

Animals and Earthquake Prediction

by Helmut Tributsch

From the back cover: "Two days before an earthquake struck Helice, Greece, in 373 BC, snakes, weasels, and worms deserted the city. Minutes before the Naples quake of 1805, oxen, sheep, dogs, and geese cried out in unison. A herd of horses tore loose and ran off in panic just prior to the San Francisco earthquake of 1906.

Helmut Tributsch, Professor of Physical Chemistry at the Free University of Berlin, visited his native village of Friuli shortly after it had been devastated by an earthquake in 1976. He was intrigued by the stories told by his old friends about their animals' strange behavior in the hours before the quake. This experience started Tributsch on a search through ancient and modern lit-

When the snakes slither out of bed...

erature for stories relating animal behavior and the appearance of such phenomena as luminosity, clouded springs, and strange fogs to the onset of earthquakes. This book summarizes his findings..."

Covers 78 earthquakes from 373 BC to 1979 and the unusual phenomena that accompanied them. Not only is it interesting reading, but it explores the fringes of science. Unusual. Reliable. I think you'll like it. 6x9 paperback 248 pages

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HOW TO LOOK THINGS UP AND FIND THINGS OUT

HOW TO LOOK THINGS UP AND FIND THINGS OUT
by Bruce L. Felknor

From the back cover—

"There are thousands of reference books on the shelves of libraries and other research facilities today—all unique and all a little intimidating. *How to Look Things Up and Find Things Out* shows you how to navigate the convoluted and confusing world of encyclopedias, sports almanacs, how-to manuals, library card catalogs, specialized dictionaries, and even computer databases. Its clearly organized, entertainingly written chapters show you how to look up information about the arts, religion, education, industry, technology, recreation, and many other topics.

How to Look Things Up and Find Things Out is a must for anyone who does research for any reason. It is a map to the world of information that no one—student, teacher, writer, or businessman—should be without."

I shouldn't offer this. I don't like to give away my secrets. But the truth is the better you are at using books to investigate the world around you, the better it is for the both of us. And I'm embarrassed to admit that I've learned more than a few tricks from this book. Consider it. 6x9 paperback 290 pages

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Oh No! Not Another Lindsay!

CAMDEN BOOK NEWS
by Camden Miniature
Steam Services

Many, if not most, of the books listed in this catalog are sold in the United Kingdom by Camden. A surprising number of books by other American publishers are sold by Camden as well. These books are easier and usually cheaper to obtain from stateside dealers.

But! He offers a number of other quality books not often seen in this country on machine shop, steam engines, locomotives, model building, railway history, steam boats, steam tractors, engine plans, and more. And it might be worth your while to send \$5.00 (currency might be best) and request a catalog. You'll find it to be quite professional, although, it is obviously "degenerating." Proprietor, Adam Harris is obviously being corrupted by the nonsense he sees in my catalog and hears from me personally! Don't hold that against him. Order a catalog anyway!

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HOW TO WORK FOR A JERK

by Robert M Hochheiser

Whenever someone new hires in here, I give them a handful of Valium and a copy of this book. After ten minutes with me, they're usually so bewildered they've swallowed the book and are reading the tablets!

Chapters include: they do it on purpose; the cast of characters, dilettantes, fops, experts and other meat-heads; corporate dinosaurs; inhuman resourcefulness; politics; if you're also a boss; and it's only a job.

"Do you think of your boss as a grade A unadulterated jerk whose brains are on vacation? Does he act like a world class bozo who would get the Nobel Prize in bungling if there were such an award? Has he given you the impression that his concept of developing a good idea is cooking up some preposterous reason for denying you a raise?"

I once worked for people like that, and I'm sure

BUYING A CAR? How to Stick It to the Dealer Before the He Can Stick It to You

(written by a
dealer...)



BUYING YOUR NEXT CAR

How to Stick It to the Dealer Before the Dealer Can Stick It to You
by J Michel White

"New or used, purchased or leased, here's an easy-to-use, step-by-step guide for winning the car-buying game. You'll learn how to: level the playing field, develop your own game plan, and win a fair deal on your own terms.

This indispensable book provides you with the all-important answers to questions like: How much does the dealer really pay for a car? How much can I really get for my trade-in? How do I know I'm getting the best deal? How can I turn the dealer's tricks to my advantage? Can I really afford the car I want? Should I consider leasing my next car? "

Gonna buy another car? Get

hip! Do a better job this time negotiating for the best price, whether buying new or used. Or for that matter, even if you intend to buy a worn-out hulk or a confiscated luxury car at a government auction. The tips are here.

The author started out buying a '48 Plymouth when he was 15 years old, and has since owned more than 170 cars!!? Needless to say, he has been a super car salesman, and he knows the tricks. Here, he'll teach them to you.

Get hip. Get a copy. The money you save could buy you a copy of every book in this catalog! We'd both like that! 5 1/2 x 8 1/2 paperback 138 pages
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WORK FOR A JERK?

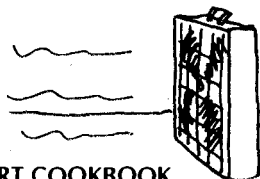
you have too. Get even. Work around them and be successful. Some of my past employees swear I'm in this book, but they're the ones with my foot print on their rear ends, a result of their inattention to your needs.

I wish I had had this book years ago. I could have counterattacked and achieved success much earlier. And I could have watched those jerks hang themselves and slowly twist in the wind.... Good reading. Useful. Get a copy. 5x8 paperback 227 pages

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THE "I LOVE TO FART" COOKBOOK



I LOVE TO FART COOKBOOK

by Travis W. Pacone

You had best not be downwind from the author! He presents his favorite recipes and rates them on their ability to produce gas! Enjoy such great dishes as Rumble Seat Salad, Turkey Talkback Stuffing, Neanderthal Bison Blaster, and many others.

While you're mixing up a batch of Swamp Gas Soup, you can read interesting background information and enjoy



the cartoons. But be careful! If you give this book to your wife and she uses it, you may end up sleeping alone in the garage!

Irreverent! Tasteless! Disgusting! In other words, a book you'll probably enjoy... or you know someone who will. Makes a ridiculous gift! Grab a copy or two! 7 1/2 x 5 1/2 paperback about 128 pages

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THE GREAT BOOK OF OPTICAL ILLUSIONS

by Gyles Brandreth

I've been told that reading this catalog too often will make you go blind, perhaps even make hair grow on your tongue! If your eyesight hasn't given out entirely by now, then totally destroy it with these optical illusions.

From the back cover: "If you open this book, be prepared for moving specks before your eyes, gray spots that appear and disappear, solid objects that cannot exist, straight lines that wave and bend, gyrating circles, pulsating patterns, and mazes that muddle the mind! Do not believe anything you see. Do not attempt to read this book with a weak stomach. You have been warned. . ."

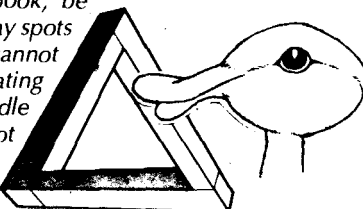
If you regularly read this catalog, then you certainly don't have much taste in literature! If you're wondering if you can handle this great literary work, don't sweat it. It's written for kids. Chances are you can get through it (although my 8 year-old had to help me at times...)

Fun book. No useful value. Cheap. Interesting illusions. Old standards and new ones, too. 5 1/2 x 8 1/2 96 pages.

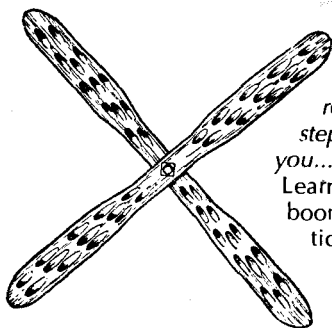
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Zap Your Eyes! Go Blind!



THROW BOOMERANGS!



HOW TO MAKE THEM AND THROW THEM

by Bernard S. Simon

"It only takes minutes to make a good guaranteed-to-return boomerang. By following a few more simple steps you will learn to throw it so it will always return to you..."

Learn how to make all of the standard designs: pin-wheel, boomabirds, airplane shapes, other ornamentals, tumblers-ticks, and others.

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YELLOW SNOW!

"As ripe, raunchy and unprintable as honest 'country humor' could possibly be... Randolph is absolute tops among America's folklorists." -

"For readers who enjoy bawdy humor..."

PISSING IN THE SNOW AND OTHER OZARK FOLKTALES

by Vance Randolph

Randolph collected legends and tales of the Ozark people for over forty years, and had much of the material printed in five volumes by Columbia University Press in the mid-1950's. But no one had the guts to print the dirty stories in his collection. The original manuscript was deposited in the National Archives and at Indiana University about 1954. In 1976 the University of Illinois found the courage to put the collection in print.

If you're offended by this type of material, for God's sake DON'T order a copy. (And don't write to complain. Just keep your opinion to yourself on this one.) But if you like a little ribald humor once in a while, this is really funny in places, and quite interesting.

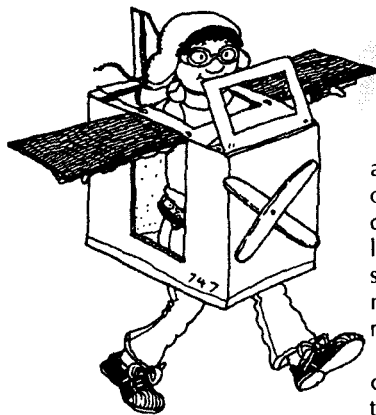
"One time there was two farmers that lived out on the road to Carico. They was always good friends, and Bill's oldest boy had been a-sparking one of Sam's daughters. Everything was going fine till the morning they met down by the creek, and Sam was..."

And on it goes. Each story is several paragraphs long, and most use words you won't find in family newspapers (but you WILL find in movie theaters). The introduction explained, "The Ozark hillfolk seldom tell ribald stories in mixed company, as many city people do. They have their own ideas of propriety, and are often shocked by innocuous urban conversation. The old-timers feel that sexual and scatological topics have no place in casual talk between men and women... Most of the bawdy tales which I have collected were told by adult males when no womenfolk were about... Such stories are not aphrodisiac, or intended to incite antisocial sex activity. They merely evoke laughter."

Crazy book! Dirty stories. Recommended to me by local bankers, lawyers and other professionals with a sense of humor. (If the rest of the community only knew! But maybe they already do....) When you get tired of machining metal, open a beer and have a laugh. Order a copy of this. 5 1/2 x 8 1/2 paperback 153 pages (no illustrations fortunately)

Cat. no. 6037

\$6.95



BUILD IT WITH BOXES

by Joan Irvine

This is written for kids ten and up, so I know you can handle it even though parts might be a bit confusing. If so, get your niece, daughter or granddaughter to translate the instructions for you. Then the two of you can have fun.

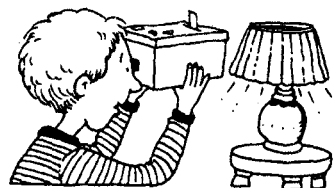
This fun illustrated book will teach you and your kids how to make simple boxes from paper and how to make crazy things from cardboard cartons like dioramas, a mini-golf game, a pin-hole camera that really takes pictures, and an obstacle course. You can make costumes like an

FUN WITH BOXES!

airplane, triceratops, a sports car or a moon suit. (Ralph Cramden could have used this stuff at his lodge meetings...) Build a monster puppet, an elephant mask, medieval castle theatre and much more.

Sure you can pour aluminum castings and machine them into tools, but can you build a fantastic clubhouse for your kids from a cardboard cartons? It's easy. And when you show them how, they'll think you're a genius. (But if you keep pouring metal and ignoring the wife and kids, you may need to sleep in a cardboard clubhouse!) Get your act together, and order a copy of this. Great gift. Get one! 8 1/2 x 9 1/2 paperback 96 pages Cat. no. 6049

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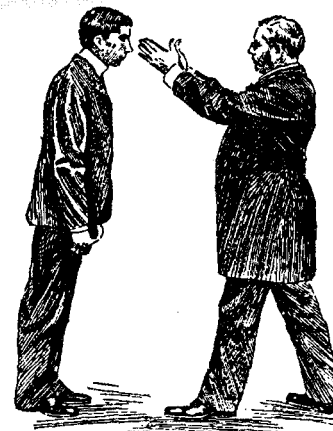
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HOW TO GIVE HYPNOTIC EXHIBITIONS

by Prof. L. A. Marraden

It won't be long before you want to take your hypnotic powers into nightclubs to earn a few bucks. Let the professor show



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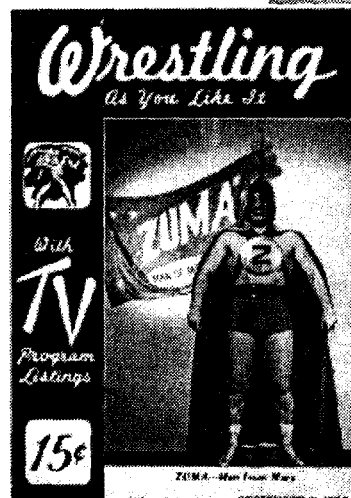
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THE ENCYCLOPEDIA OF BAD TASTE

by Jane & Michael Stern

I know for a fact YOU'LL enjoy this hilarious, well-illustrated book because you have proven beyond any reasonable doubt that YOU have no taste whatsoever. How do I know? You're reading this catalog....

You get an entertaining and amusing history and illustrations on every imaginable example of bad taste from accordion music to zoot suits. And if you think you're really a smooth dude, you had better think again. You ain't nothin' fella if you eat Twinkies and Spam, listen to Muzak, think Dolly Parton is a babe,



watch professional wrestling from your reclining chair, drive your van to visit a wax museum, collect sno-globes and Hummels, and enjoy heavy metal music.

SUCH BAD TASTE!

Join us red necks and enjoy life!

This is a great book. After all the authors put down (and rightly so) all the good things in life from Barbie dolls, beer and big breasts to Frederick's of Hollywood to Bob Guccione.

Get a copy. Get your feelings hurt. Or give a copy to someone who needs his feelings hurt. Join the rest of us low-class red necks and enjoy life. (If I can sell enough of these encyclopedias, perhaps I can buy some fuzzy-dice for my rear view mirror and a video tape of Liberace!)

Fun book. Lot's of laughs. Valuable weapon for knocking snooty people down off their pedestals. Order a copy! 9x10 paperback 331 pages

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MICROSCOPES!

THE MICROSCOPE AND HOW TO USE IT
by Dr Georg Stehli

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by radio on a secret wave-length!

Lindsay claims the Devil has been advising him. We know Lindsay is weird, but we don't think he's in contact with the Devil. After all, as much of a low-life as the Devil is, he has better taste than to waste time talking to Lindsay!

We really think Lindsay adjusted his radio transmitter incorrectly and is actually talking to the psychotic junkyard dealer about a mile down the road on the CB band, and he doesn't even know it.

But we don't really care. Lindsay is off investigating perpetual motion machines, energy extractors, and secret

chemical processes to convert water into gasoline. That keeps him out of the office so we can get your order processed quickly and out the door.

But a word of advice from the few sane employees left around here: If you see a book in this catalog that you really want, you had better order soon. Lindsay keeps changing the catalogs around, and who knows if the book you want is going to be available tomorrow?

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